

IMPLEMENTATION OF SECTION 507 OF THE CLEAN AIR ACT

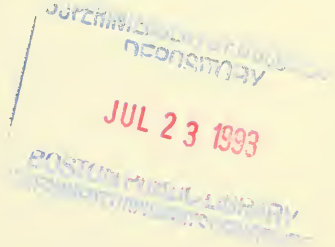
Y 4. P 96/10: S. HRG. 103-60

Implementation of Section 507 of th...

HEARING BEFORE THE SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR REGULATION OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE ONE HUNDRED THIRD CONGRESS FIRST SESSION

MARCH 10, 1993

Printed for the use of the Committee on Environment and Public Works



U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1993

65-999

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402

ISBN 0-16-040907-1

IMPLEMENTATION OF SECTION 507 OF THE CLEAN AIR ACT

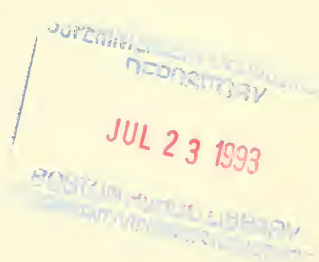
Y 4. P 96/10: S. HRG. 103-60

Implementation of Section 507 of th...

HEARING BEFORE THE SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR REGULATION OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE ONE HUNDRED THIRD CONGRESS FIRST SESSION

MARCH 10, 1993

Printed for the use of the Committee on Environment and Public Works



U.S. GOVERNMENT PRINTING OFFICE

65-999

WASHINGTON : 1993

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402

ISBN 0-16-040907-1

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

MAX BAUCUS, Montana, *Chairman*

DANIEL PATRICK MOYNIHAN, New York	JOHN H. CHAFEE, Rhode Island
GEORGE J. MITCHELL, Maine	ALAN K. SIMPSON, Wyoming
FRANK R. LAUTENBERG, New Jersey	DAVE DURENBERGER, Minnesota
HARRY REID, Nevada	JOHN W. WARNER, Virginia
BOB GRAHAM, Florida	ROBERT SMITH, New Hampshire
JOSEPH I. LIEBERMAN, Connecticut	LAUCH FAIRCLOTH, North Carolina
HOWARD M. METZENBAUM, Ohio	DIRK KEMPTHORNE, Idaho
HARRIS WOFFORD, Pennsylvania	
BARBARA BOXER, California	

PETER L. SCHER, *Staff Director*

STEVEN J. SHIMBERG, *Minority Staff Director and Chief Counsel*

SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR REGULATION

JOSEPH I. LIEBERMAN, Connecticut, *Chairman*

DANIEL PATRICK MOYNIHAN, New York	ALAN K. SIMPSON, Wyoming
BOB GRAHAM, Florida	LAUCH FAIRCLOTH, North Carolina
HOWARD METZENBAUM, Ohio	DIRK KEMPTHORNE, Idaho

C O N T E N T S

Page

OPENING STATEMENTS

Baucus, Hon. Max, U.S. Senator from the State of Montana	4
Chafee, Hon. John H., U.S. Senator from the State of Rhode Island	7
Lieberman, Hon. Joseph I., U.S. Senator from the State of Connecticut	1
Simpson, Hon. Alan K., U.S. Senator from the State of Wyoming	42

WITNESSES

Backus, Scott, President, HAR-CON Chrome Company, Hartford, Connecticut, on behalf of the National Association of Metal Finishers	30
Prepared statement	76
Carvalho, Thomas W., Vice President, Chem-Tech Rubber, Inc.	34
Prepared statement	81
Cooper, Benjamin Y., Senior Vice President for Government Affairs, Printing Industries of America, Inc., Alexandria, Virginia	28
Prepared statement	73
Dunlap, John, Chief Deputy Director of External Affairs, Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, California	10
Prepared statement	58
Nanzetta, Philip, Manager, Manufacturing Technology Programs, National Institute of Standards and Technology, Department of Commerce	13
Prepared statement	71
Roy, Manik, Pollution Prevention Specialist, Environmental Defense Fund	32
Prepared statement	78
Seitz, John S., Director, Office of Air Quality Planning and Standards, Office of Air and Radiation, U.S. Environmental Protection Agency	5
Prepared statement	49
Responses to additional questions	51
Watson, Kirk, Chairman, Texas Air Control Board, Austin, Texas	8
Prepared statement	54

ADDITIONAL MATERIAL

STATEMENTS:	
Louisiana, State of	83
Society of the Plastics Industry, Inc.	97

IMPLEMENTATION OF SECTION 507 OF THE CLEAN AIR ACT

WEDNESDAY, MARCH 10, 1993

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR REGULATION
Washington, DC.

The subcommittee met, pursuant to notice, at 9:12 a.m. in room 406, Dirksen Senate Office Building, Hon. Joseph I. Lieberman [chairman of the subcommittee] presiding.

Present: Senators Lieberman, Chafee, Kempthorne, and Simpson.

OPENING STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator LIEBERMAN. Good morning, and welcome to the hearing. This is the first hearing in this session of the subcommittee on Clean Air and Nuclear Regulation, which is a slight reconstitution of its predecessor subcommittee, particularly including clean air, both outdoor and indoor. I am delighted to have the opportunity to be chairman of this subcommittee during this session of Congress and to begin with this hearing.

Four years ago, it was an extraordinary challenge and opportunity for me to become involved as a member of this overall committee in the drafting of the Amendments to the Clean Air Act of 1990. Enactment of this law is one of the major congressional achievements in the area of environmental protection in recent times, a genuinely bipartisan achievement, and clearly was one of the major achievements of the 101st Congress in general.

But fulfillment of the promise of that law, which is healthy air for all Americans, lies as much in how we now administer the law—and enforce it, of course—as it does in the accomplishment of the law on paper.

I'm afraid that during the last Administration the White House often placed obstacles in EPA's path in enforcing and implementing the law. Now it is up to the new Administration to make timely implementation of the law, with strict adherence to its statutory language, one of its top priorities. This means not only writing tough and fair regulations, but assuring that they are observed in the real world so that real reductions in pollution are realized.

Through this subcommittee, and with the support of the chairman of the overall committee, Senator Baucus, and the ranking member, Senator Chafee, I hope to play an active role in overseeing the implementation of the Clean Air Act Amendments. Not

only is the health of our citizens and the quality of our environment at stake, but effective use of this law can literally save billions of dollars in health care costs each year by reducing air pollution-related illnesses.

The committee chairman, Senator Baucus, is starting the work of the overall committee in this Congress with a series of hearings reviewing some of the broader issues in environmental protection which extend beyond any one statute. The chairman has asked various subcommittee chairmen, including myself, to follow up on these broader themes with a closer look on some of the details, and that's what we're doing here today.

Today we are going to focus on technical and compliance assistance to small businesses, with a particular emphasis on section 507 of the Clean Air Act Amendments, the Small Business Stationary Source Technical and Environmental Compliance Assistance Program, which for the remainder of the hearing will try as best I can to simply call section 507.

I scheduled this topic for the first hearing of the subcommittee because technical assistance is a relatively new, but potentially extremely effective, approach to achieving our environmental goals. The Clean Air Act Amendments of 1990 are undoubtedly one of the most complicated environmental laws ever enacted. Under the proposal, many smaller sources of pollution will be regulated for the first time, particularly under the ozone provisions. Taken together, these smaller sources are significant contributors to air pollution, but small businesses frequently face obstacles in identifying and adopting cost-effective environmental strategies. Small businesses have limited access to legal and technical staff, and may need assistance in identifying the requirements of the law and the technology and process changes available for achieving compliance in the most effective manner.

Perhaps just as important, small businesses need assistance in identifying pollution prevention strategies which save money and help improve their competitiveness. As more and more businesses are discovering, environmentally sound manufacturing actually shows up on the bottom line, not just in the air. Competing in the global marketplace means limiting the inefficiencies that pipes and stacks often symbolize.

Today, lawyers and engineers are sponsoring literally hundreds of conferences around the country to teach businesses about the Clean Air Act and how they can comply with it, but many small businesses simply cannot afford to attend these conferences, and the truth is that they should not have to. Congress adopted section 507 to ensure that through a combination of Federal and State efforts, small businesses would have access to the information they need to comply with the act.

The heart of the program is a requirement that each State establish a Small Business Assistance Program to dissemination information on compliance requirements and control technologies, and to do so in plain language. These programs should assist businesses in receiving permits in a timely manner. The assistance States can provide takes a variety of forms, from telephone hotlines to on-site visits by State government personnel.

Section 507 also requires that the State programs assist small businesses in pollution prevention. While many larger businesses have already adopted pollution prevention strategies, smaller businesses are often not aware of these approaches. So if States, with strong assistance from EPA, implement this provision effectively, there is enormous potential for far-ranging benefits to human health and environment, extending beyond what I think we can achieve from normal control strategies.

EPA must take a leadership role in identifying pollution prevention strategies for smaller sources of pollution, and must do so expeditiously so that smaller businesses don't have to implement expensive control technologies.

Technical assistance programs, in fact, have already helped businesses identify pollution prevention approaches that save money. For instance, North Carolina's "Pollution Prevention Pays" program showed annual savings of more than \$410,000 at just six plants that received technical assistance. In Ventura County, California, a pollution prevention assistance program which involved sending government specialists into facilities saved industry a minimum of \$50 in waste management for every dollar invested by Ventura County.

These are but two examples of what one of our witnesses from NIST will share with us today, which are other successes in this area.

Finally, technical assistance programs may also reduce implementation costs for Government agencies. These programs are based on the premise that the relationship between Government and business need not be primarily adversarial, and should not be. Vigorous enforcement efforts will always be necessary, but as large numbers of dispersed sources come into the regulatory fold, technical assistance programs must emerge as a critical tool for meeting our environmental goal with limited Government resources.

Today we are going to examine, with Federal and State witnesses and representatives of the private sector, how section 507 is being implemented, and whether sufficient resources are being devoted to ensuring its effectiveness. Obviously, it is still early in the provision's implementation; but given its importance, it is not too early to ask how the provision is being implemented.

I am particularly interested in exploring how to measure the success of this program over a longer period of time. Some have suggested that the same type of program established in section 507 should be expanded to other environmental laws. I think it is going to be important for us to know whether the program is working as we look at other reauthorizations of major environmental statutes during this session and beyond.

I am going to ask our witnesses today whether section 507 itself, with proper implementation, can assist small businesses from a multimedia perspective.

We are also going to review other technical assistance programs, and particularly I am interested in the Manufacturing Technology Centers that are set up with the National Institute of Standards and Technology of the Department of Commerce, and to see whether they can provide us with a model. The six Regional Centers now in operation have been extremely effective in improving the tech-

nological performance of small-and medium-sized businesses by transferring technology to those businesses and disseminating scientific, management, and technical information. Integrating environmental assistance and services into the programs provided by these Centers, I think, can further enhance the performance of small companies.

As most people here probably know, the Clinton Administration is committed to increasing the number of these Centers, and I think now is the timer to include compliance and pollution prevention assistance as part of the mission of the Centers, with an explicit role for EPA in that effort.

Based on work that I have done in preparing for this hearing, I have reached a conclusion that it is important to establish through legislation a clear and sustained role for EPA in providing small business assistance. I have prepared a bill that would, among other things, elevate EPA's Small Business Ombudsman Office and provide it with a legislative mandate. This bill would also strengthen EPA's assistance to the Manufacturing Technology Centers Program, and I am going to be interested today in the reaction of our witnesses to these ideas.

Senator Baucus has a statement that will be included in the record at this point.

[Senator Baucus' statement follows:]

STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Mr. Chairman, thank you. I want to express my appreciation to you for holding this hearing today. Efforts to assess the effectiveness of technical and compliance assistance programs are of great value to our work on the Environment and Public Works Committee.

Implementation of the Clean Air Act Amendments of 1990 will necessitate, for the first time, regulation of many small businesses. Small businesses, as well as larger companies, contribute to air pollution; therefore, it is essential that we find ways to curb the pollutants that these businesses emit.

Nonetheless, we must find ways to achieve our environmental goals, such as clean air, in the most cost-effective way possible. Small businesses are at the heart of our nation's economy, and are the best hope for its future vitality.

Congress crafted section 507 of the Clean Air Act to provide small businesses with the technical assistance and compliance information they need and want. This provision was intended to build on existing Federal and State programs and to assure that a specified level of technical assistance was available to all small businesses, regardless of location.

Is the approach of section 507 effective? Are the states on the right path toward establishing programs that will help small businesses comply with the Clean Air Act, and provide technical assistance? Is the EPA providing adequate guidance to states as they establish these programs? In the future, will we be able to coordinate air, water, and waste programs? Should Federal technical assistance programs be expanded to other environmental laws?

These questions are not easily answered. Yet we must address them if we are to craft effective environmental legislation in the future.

We all want an efficient, vibrant economy and a healthy environment. We can achieve these results by working with small businesses, not against them. This has long been a particular focus of mine. In my home state of Montana, small businesses account for a large percentage of employers and new jobs. In fact, close to half of all jobs in Montana are in establishments with four or fewer workers. Therefore, I understand the need for the Federal government to be sensitive to the needs of small businesses.

Again, I commend the initiative of the Chairman of the Subcommittee on Clean Air and Nuclear Regulation, and I look forward to examining these issues in greater detail in the coming year.

Thank you.

Senator LIEBERMAN. I would now call our first panel to the table: Mr. Seitz, Mr. Watson, Ms. Brown, Mr. Dunlap, Dr. Nanzetta.

For the record, Mr. Seitz is the Director of the Office of Air Quality Planning and Standards, Office of Air and Radiation, USEPA, and Ms. Brown is the Small Business and Asbestos Ombudswoman. Mr. Watson is the Chairman of the Texas Air Control Board. Mr. Dunlap is Chief Deputy Director of External Affairs, Department of Toxic Substances Control, California EPA. Dr. Philip Nanzetta is the Acting Director and Manager, Office of Manufacturing Programs, and Director of Manufacturing Technology Centers Program at NIST, Department of Commerce, Gaithersburg, Maryland.

I am delighted to have a panel of this range and quality. I very much appreciate your willingness to be here, and in some cases, to come some distance to do so.

We would like to start with Mr. Seitz. To the extent possible we ask you to keep your opening statement within five minutes. If you haven't concluded in five minutes and you have a little more to do, I am not possessed of a hook or anything of that kind, so feel free to fully exercise your First Amendment rights, but with some limits.

Mr. Seitz, good morning.

STATEMENT OF JOHN S. SEITZ, DIRECTOR, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY KAREN BROWN, SMALL BUSINESS AND ASBESTOS OMBUDSMAN

Mr. SEITZ. Thank you, Mr. Chairman. It is a pleasure for Karen and me to be here with you this morning to testify concerning EPA's implementation of section 507 of the Clean Air Act concerning small business technical assistance.

As President Clinton has said and as the agency strongly believes, small business is a critical component to the economic growth and viability of our country. We strongly support that and believe that. In addition the Congress passed the Clean Air Act Amendments of 1990 that contain one of the most ambitious regulatory agendas that has been seen in environmental legislation.

As you have indicated, the regulatory agenda in that act sets forth a program that will affect every major industry category in this country. My office alone, by the end of 1993, will have generated over 70 major regulations and guidance documents that affect every major industry category in the country.

Mr. Chairman, you and other members of Congress realized this when the act was being debated, and inserted section 507 into the act, which requires the agency to promulgate guidelines concerning implementation of that provision, and also for States to establish Small Business Assistance Programs.

After the act was passed, Ms. Brown's office and my office developed and promulgated those guidelines in January, 1992, requiring States to submit those programs to us, which basically addressed three points: the establishment of a Small Business Ombudsman;

the establishment of a Compliance Assistance Program; and the establishment of an advisory panel.

As of today, 38 States have submitted those programs to the agency, and we expect that within 12 months all remaining States will submit the programs to us, and that they will all be implemented in November of 1994.

In addition, my office in North Carolina has long maintained a series of hotlines and technical assistance programs geared to providing information to State and local agencies concerning emissions measurement technology, control technology, and various other technical assistance modes to those States. In 1991 we augmented those services to include access to small business, as well as to the Small Business Technical Assistance Programs currently in place within the States. So we strongly believe that is a positive step forward in, as you suggest, linking that technology so that people can understand it.

In addition, in conjunction with the Small Business Office, we have promulgated a document entitled "The Clean Air Act Amendments of 1990: A Guide for Small Business." This is a document that takes the Clean Air Act in complex regulatory language and puts it in plain English so that small businesses can begin to understand what is heading their way with respect to implementation of the Clean Air Act.

In addition, we also operate a series of electronic bulletin boards that basically provide a mechanism for any small business—or for that matter, anyone—to call in and actually download documents that are under development, guidance documents, information that is directly usable to those individuals in the small business community. Those bulletin boards receive in excess of 50,000 phone calls a year in my office in North Carolina.

In addition, EPA's Office of Chemical and Emergency Preparedness runs a hotline concerning accidental release and chemical emergency prevention, and has also put forth a book called "Managing Chemical Safety: Putting It All Together." Again, this has been widely distributed, and we believe it is important to let small business and large industry to know how to handle chemicals safely.

In addition, and most importantly—you touched on this—we believe that it is important that, in the development of our regulations before they are put on the books in final form, that we bring small business to the table, that we understand their concerns in the development of our regulatory programs. Evidence of this is seen in the proposed dry cleaning standard we put out recently, as well as in the operating permit rule, where we exempt some small businesses from implementation of this program for a period of five years. So I think we are moving in an important direction there.

Finally, Mr. Chairman, I would like to indicate that I think there are business opportunities with the Clean Air Act with respect to some of these emerging technologies.

In addition, I would like to touch on the role of the Small Business Ombudsman within the agency. This office was established in 1982 as mainly an outreach mechanism and a hotline to answer calls concerning hazardous waste. It has grown from a program dealing mainly with hazardous waste to truly a multimedia pro-

gram within the agency now. In its beginning in 1982 it received several thousand calls; in 1991, it received in excess of 20,000 calls. In addition, Ms. Brown's office sends out a Small Business Newsletter to in excess of 10,000 sources that are small businesses that gain knowledge from this publication.

From the passage of the Clean Air Act up until today, Ms. Brown's office and my office have worked closely together to implement section 507 of the Clean Air Act. With respect to promulgation of the guidelines in January of 1992, Ms. Brown's office sent letters to the Governors. So we think we have a close working relationship. Ms. Brown's office is in the process of putting together a meeting this fall, for the first time, of all State Small Business Ombudsmen to discuss implementation of section 507.

So as you suggest, we are in the middle of the process. We have a long way to go, but we think we are heading off in the right direction.

At the conclusion of the other testimony, Ms. Brown and I will be pleased to answer any questions.

Senator LIEBERMAN. Thank you, Mr. Seitz.

I want to welcome the ranking member of the committee, Senator Chafee, and Senator Kempthorne, as well.

Would you like to make an opening statement, Senator Chafee?

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. I will just put one in the record, thank you very much, Mr. Chairman.

Senator LIEBERMAN. Thank you.

[Senator Chafee's statement follows:]

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

I wish to join with the subcommittee chairman, Senator Lieberman, in extending a welcome to all of the witnesses who are here with us this morning.

I remember well the discussion we had when Senator Boschwitz first offered the small business assistance program as an amendment to the 1990 Clean Air bill. He had worked with Mr. Cooper, who is a witness today, and with others to draft the legislation that is now section 507 of the Clean Air Act.

We are at midstream in the implementation of section 507. EPA has issued its guidance and most states have developed their plans. We have a good idea what these programs will look like when they are fully carried out. In that light, I think it would be useful to reflect again on the expectations that we had when section 507 was first presented.

The steps to be taken under these state programs are all very useful. Regulations written in plain language. Toll-free hotlines. Technical assistance. Small business advocates. These are all useful steps.

But the original intent went a bit farther. Before the 1990 amendments, the states in writing their implementation plans . . . their SIPs . . . were only required to focus on air pollution sources emitting more than 100 tons per year. Small businesses don't, as a general rule, emit such a large quantity of pollutants.

But in the 1990 Clean Air Act Amendments Congress mandated that the states regulate much smaller sources—generally 25 ton sources but as small as 10 ton sources in some cases. So, there was a concern that a whole new universe of business entities would be swept up in state implementation plans in the future.

In offering this amendment Senator Boschwitz hoped, and it is a hope I share, that we could get out ahead of the planning process and develop compliance strategies for small business before the new tide of regulations reached them. Explaining how a regulation works in plain English can be helpful. But developing new technol-

ogies and new practices that might avoid the burden of regulation altogether, or lessen it significantly, is what we are really looking for.

Pollution prevention—developing new technologies and practices so waste is not generated and pollution control regulations don't apply—would be the best kind of small business assistance. I want to say to the folks here from EPA that I appreciate what has already been done to implement section 507. But we can go beyond making the regulatory program "user friendly." We could strive to make it truly beneficial.

So, how do we do that? We need to identify the industries that may be targeted as 25 ton sources in the new SIPs. We need to identify the technologies and practices that are available to reduce their emissions below the regulatory threshold. And for those who cannot escape regulation altogether, we need alternative monitoring and compliance methods that will reduce the burden. Finally, we need to let small businesses know about these options as soon as possible.

EPA should commence a Phase II effort for section 507 designed to answer each of these questions in a systematic way. Administrator Browner has said that pollution prevention needs to be at the heart of everything that EPA does. Let's put that philosophy into action right here and now.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Senator Kempthorne?

Senator KEMPTHORNE. No statement, Mr. Chairman, thank you.

Senator LIEBERMAN. Thank you.

Let's go on now to Mr. Watson, Chairman of the Texas Air Control Board of Austin, Texas.

Thanks very much for being here this morning.

STATEMENT OF KIRK WATSON, CHAIRMAN, TEXAS AIR CONTROL BOARD, AUSTIN, TEXAS

Mr. WATSON. Thank you very much, Mr. Chairman, and members. Good morning.

As the chairman has indicated, I have the privilege of serving as chairman of the Texas Air Control Board, which is the Texas agency responsible for air quality regulation. I appreciate the invitation to speak to this subcommittee.

Congress, in my view, was very wise in recognizing the burdens small businesses face in complying with the Federal Clean Air Act Amendments of 1990. And Senator Lieberman, I compliment you and the members of the committee for the leadership that has been shown in setting forth in section 507 the requirements for the establishment of a program that will aid small businesses.

Texas began organizing our small business program almost a year ago, eight months before the State Implementation Plan was actually due. In doing so, I am proud to say, Texas was among the first States in the Nation to institute such a program. In Texas, our approach to the Clean Air Act Amendments has been to clean up the air in a way that causes the least disruption to people's day-to-day lives, and in ways that reduce negative economic impact. This is a particular challenge with small businesses simply because the sheer number impacted is almost overwhelming. Our research indicates that almost 60,000 small businesses in Texas, representing as many as 500,000 jobs, are being impacted by these regulations in our State alone, and it will take a substantial investment of time, energy, and dollars to ensure that these businesses are able to comply with the Clean Air Act. Preliminary estimates indicate the cost to these small businesses may be more than \$1 billion.

In response to this challenge we established a Compliance Advisory Panel that will report both to the Governor and to the Envi-

ronmental Protection Agency regarding the work of our Small Business Program. We established a Small Business Technical Assistance Program to begin notifying small businesses of the act's requirements and to provide informational and educational assistance, and we have created an independent Small Business Ombudsman to give a voice to our small businesses.

The role of the ombudsman's office is to provide small businesses with a sounding board, to assist with the cutting of Government red tape, and to offer a system for resolution of complaints. To allow the ombudsman to maintain independence from the agency's day-to-day staff operations as an advocate for small business, this office is set up to report directly to the Chair of the Air Board. The Ombudsman's Office also has a direct relationship with the office of Governor Ann Richards, the Texas Legislature, and the Environmental Protection Agency.

In addition to cutting red tape, the Office of the Ombudsman will serve as a clearinghouse for information and referral; help businesses resolve their problems and complaints; work to develop financial assistance programs for air pollution control equipment; ensure that materials developed for small businesses are written in easily understood language, with a minimum of bureaucratic mumbo-jumbo; develop and coordinate the establishment of Small Business Advisory Committees; and establish a 1-800 hotline to provide free access to the Ombudsman's Office. This particular item was accomplished in April of 1992.

Now, we are learning that the greatest fears of small business owners concern the following three things:

First, how to gain financial assistance to purchase the technology necessary to comply;

Second, how to obtain up-to-date, easy-to-understand information on the technology that meets regulatory requirements and is economically viable; and

Third, how to avoid being penalized before they acquire the technology necessary for compliance.

Finding the dollars to assist a small business owner-operator in the purchase of control technology is our greatest challenge. It graphically reveals the necessary but sometimes uneasy balance between environmental health and economic health. Adding environmental controls seldom increases cash payback or increases the productivity of a business. As a result, our financial institutions have shown little interest in funding the technology that will be necessary to allow these enterprises to continue operation.

Worrying about whether the addition of environmental technology will make a business more money is too limited a point of view, in my view. Financial institutions must realize that businesses that do not, or financially cannot, comply with our environmental laws may be lost to our State economic base. That loss will mean an accompanying loss of jobs and a dramatic negative economic impact. Of course, as the chairman noted in his opening remarks, this analysis doesn't even begin to include the cost to our economy from negative health effects caused by pollution.

In the hope of creating better understanding and to expand our traditional framework for analyzing where we should focus our resources, I have started appointing Regional Small Business Adviso-

ry Committees in each of the State's nonattainment areas. These committees are made up of small business owners, environmentalists, regulators, governmental representatives, and representatives of the financial community. We are creating an environment where small business and financiers can meet eye-to-eye to develop solutions to problems that affect us all.

Next week I will meet with Carol Browner, the Administrator of EPA. I will urge her to initiate contact with the Small Business Administration, to sign a memorandum of understanding to earmark SBA loan guarantees for small business owners to purchase environmental control technology, and I urge the members of the committee to do the same.

In addition, I encourage you to promote the development of a low interest loan program that will allow small business owners to buy the technology they need to help us clean up our air.

Briefly, another major concern of small business owners and operators is a lack of technical knowledge. Mr. Chairman, you asked how Manufacturing Assistance Centers, such as the National Institute of Standards and Technology's Manufacturing Technology Centers, could be of assistance, and this is the place. Imparting knowledge of technology to small businesses in language they understand would constitute a major positive achievement.

Finally, let me mention that in Texas, to allay the fears that the business will be penalized before having a chance to take corrective action and the fear that conversation with agency staff will lead to targeting for violations, we have taken several positive steps.

First, we have established a policy of confidentiality within the jurisdiction of the Ombudsman's Office. Any information obtained by this office regarding a small business compliance difficulty will not be passed to the agency's Compliance Division for action.

Second, we have developed a "minor source policy" that will eliminate the first-time penalty for a small business infraction, and we will be developing a creative penalties program which will be directed toward compliance with the law rather than fines that will only deplete the small businesses' resources.

We are hopeful that these strategies and others, that I am prepared to answer questions of the committee on, will be useful in bringing our small businesses into the regulatory framework to clean up our air.

I appreciate the opportunity to testify and I am open to any questions.

Senator LIEBERMAN. Thank you, Mr. Watson. That was very interesting testimony. I look forward to the question period.

Mr. Dunlap, welcome from California. Thanks for being here.

STATEMENT OF JOHN DUNLAP, CHIEF DEPUTY DIRECTOR OF EXTERNAL AFFAIRS, DEPARTMENT OF TOXIC SUBSTANCES CONTROL, CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, SACRAMENTO, CALIFORNIA

Mr. DUNLAP. Good morning, Mr. Chairman and subcommittee members. It is a pleasure to be with you this morning.

I am John Dunlap, the Chief Deputy Director for External Affairs for the California Department of Toxic Substances Control

within the California Environmental Protection Agency. It is a pleasure to provide testimony on behalf of Governor Pete Wilson and the Cal/EPA.

In April of 1991, Governor Wilson formally proposed the creation of the California EPA. In so doing, the Governor fulfilled a campaign promise to coordinate the State's environmental quality programs and assure that there is a cabinet-level voice for environmental quality, in concert with the natural resource protection responsibility of the Secretary of Resources. As a result of the reorganization process, Cal/EPA currently consists of the Air Resources Board; the Department of Pesticide Regulation; the Department of Toxic Substances Control; Integrated Waste Management Board; Office of Environmental Health Hazard Assessment; State Water Resources Control Board, and Regional Water Quality Control Boards.

I will be discussing briefly programs currently in place or in the process of being implemented that are designed to assist small businesses with environmental compliance in California. My testimony today will directly address those items that your committee requested we cover.

In the area of permit reform, Cal/EPA recognizes that obtaining a permit can be a costly and time-consuming process for businesses, especially small businesses. That is why Cal/EPA has made permit reform its primary objective; however, permit reform should not be perceived in any way as weakening California's tough environmental standards. Governor Wilson and Cal/EPA believe strongly that there cannot be any false choices between a healthy economy and a healthy environment. The two go hand-in-hand, quite simply. Permit reform can facilitate economic growth without reducing environmental standards.

Cal/EPA is developing a uniform environmental permit and permit appeal process at present. The goal is to enable a business to only have to obtain one permit containing all applicable requirements instead of multiple permits from various State agencies. We are working very closely with local districts and special districts to ensure that they are part of that process, as well.

A discussion paper was released in March of 1992, about a year ago, containing options for achieving greater coordination in the environmental permit processes, and public comments have been obtained through a series of public meetings and written comments.

The agency has moved forward to implement individual items covered by these recommendations, but the majority of these reforms will be put in place based on details to be developed by several task force groups that will be created to deal with these matters directly.

Last summer, Cal/EPA opened a one-stop permit and license center in Los Angeles near the area affected by the civil unrest. The purpose of the center is to provide expert advice and assistance to businesses within the Los Angeles Revitalization Zone that need State environmental permits. The center represents one location where businesses can go for permits, variances, information on pollution prevention, and assistance on State environmental laws.

Under the area of environmental technology, under the leadership of Cal/EPA and the Trade and Commerce Agency of the State, a California Environmental Technology Partnership was established involving not only government at the State, Federal and local level, but industry, academia, financial institutions, public interest groups, and, of course, the environmental community. CETP's purpose is to promote the research, development, commercialization, and export—

Senator CHAFEE. Excuse me, Mr. Chairman.

You know, your time is going to run out pretty soon. What I would be most interested in, subject to the chairman's concurrence, I would like to see you get on to what you think we ought to do. In other words, you're telling us the things you've done, and they are good, but what should we do to help you? If that's not an oxymoron.

[Laughter.]

Mr. DUNLAP. Sure, I'd be happy to do that.

If I could, Senator, make a quick reference to what we're doing regarding compliance with section 507 in the State.

Senator CHAFEE. Sure. Go ahead.

Mr. DUNLAP. The California Air Resources Board operates a compliance assistance program, training businesses to comply with the air quality rules. The board, in cooperation with the California Pollution Control Financing Authority, has already established a \$3 million bond program, making low interest long-term loans available for the purchase of pollution control equipment. At present, loans are as low as \$10,000, giving small businesses such as service stations and chrome-plating shops an opportunity to receive financing, much along the lines that large companies have had available to them for years.

In addition, businesses can access technology clearinghouse databases for information on equipment to control all types of emissions.

As required by section 507, a Small Business Ombudsman position was created and is actively working with the small business community.

In addition, the Federal Government provided a grant of \$12.9 million in funding for the National Institute of Standards and Technology to establish the Manufacturing Technology Center. The mission of this center, of course, is to facilitate the transfer of manufacturing technology to the State's small-to medium-sized businesses, aerospace being a targeted sector. These types of activities go a long way toward encouraging not only the technical assistance necessary, but ensuring that these businesses can comply and remain healthy and strong. It is California's intent to provide a healthy economic and environmental climate for these businesses. I think support and leadership at the Federal level—in the Senate, for example—could augment these programs, provide capital, for example, in the area of military base closures so that they can be reused, etc., so that there can be incentives for new technologies to be developed.

At this point I will conclude my testimony and I welcome the opportunity to answer any questions.

Senator LIEBERMAN. Thanks, Mr. Dunlap. We'll get back to you during the question period. I appreciate that.

Dr. Nanzetta, we appreciate your being here. You have a unique perspective to bring, and we look forward to hearing from you now.

STATEMENT OF PHILIP NANZETTA, MANAGER, MANUFACTURING TECHNOLOGY PROGRAMS, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, DEPARTMENT OF COMMERCE

Mr. NANZETTA. Mr. Chairman, I appreciate the opportunity to appear today to describe the ways in which I think the national network of Manufacturing Extension Centers, called for by President Clinton, Vice President Gore, Commerce Secretary Brown, and set forth in S. 4 and H.R. 20—the ways in which this projected system can help small manufacturers use technology to improve their environmental performance and become more competitive at the same time.

I even feel a little like I'm preaching to the choir, after your opening statement urging that same direction.

I manage the Manufacturing——

Senator LIEBERMAN. We'll preach to each other.

Mr. NANZETTA. Great.

I manage the Manufacturing Technology Centers, known as MTCs, and the State Technology Extension Program, known as STEP, at NIST. These form an important part of the experience base on which we are working to define the national system of Manufacturing Extension Centers, which are targeted by the administration and by Congress.

At present there are seven MTCs, located in New York, Ohio, South Carolina, Michigan, Kansas, Minnesota, and California. They work directly with small-and medium-sized firms, both on-site and in central demonstration facilities, to help those firms utilize appropriate advanced technology and techniques to improve their competitiveness and improve the number and quality of the jobs they provide.

The MTCs work closely with other organizations to assure that they, the MTCs, can make available the full range of supportive services needed by the companies, including business planning, financing, workforce training, ideas of modern workforce organization, and so forth.

The NIST program at the program level, likewise, has begun to form linkages with other agencies to provide services and assure coordination. Just from the new faces that I've been able to meet today I can assure you that we have only begun forming those linkages, and we need to continue to build them, because what we want to be able to offer to the small firms is, in essence, one-stop shopping.

The linkages include some in the Environmental Protection Agency, particularly in the source reduction area; in the Department of Labor, dealing with workforce training; the Small Business Administration, dealing with technical advice to support loan guarantee decisions; also with the Small Business Development Centers. We work with the Department of Energy in its major laboratories;

with the Department of Defense in its Laboratory Centers of Excellence, arsenals, and other manufacturing activities.

We very strongly take the approach of building on existing strengths and resources, trying to coordinate with those, and wherever possible trying to avoid duplication of effort. The State Technology Extension Program works directly with States to help them plan and implement State-based industrial extension programs and activities. The existing centers, both those sponsored by NIST and those other extension centers that aren't funded by NIST, do already help small-and medium-sized companies apply technological solutions to their needs for environmentally conscious manufacturing. I present some examples for you in my written testimony.

The examples are frequently quite striking. In many cases the companies can, in addition to improving their environmental compliance, save money, reduce waste in their manufacturing process, improve their efficiency, and make use of materials which previously were hauled off to be dumped in landfills.

Our concept for the national network of extension centers calls for drawing upon the tremendous resource of existing technology in agencies like the Environmental Protection Agency; in National Laboratories like Livermore and Oak Ridge; in universities and industrial laboratories, in making that technology available through extension centers, both those sponsored by NIST and others as well, to the small-and medium-sized manufacturers. We have very positive experiences to date along these lines, working with other agencies, and we foresee success in expanding that experience to the full national system. There are examples in my written testimony that follow from working with other Federal agencies as technology sources.

In fact, we are in a wonderful position right now of having a rapidly converging policy agreement on how to move forward on manufacturing extension. Funds are present in the upcoming defense conversion technology package to begin to carry out some of these ideas, and to learn. We have an experience base on which to build.

Among the services that can be made available to small-and medium-sized manufacturers is the environmentally related technology assistance I described earlier. I believe this advances the interest your committee has shown in seeking approaches which support the economic strength of small businesses and leave behind for our children and grandchildren the kind of environment that we can be proud of.

I do appreciate the opportunity to appear and I would be happy to answer questions at the appropriate time.

Senator LIEBERMAN. Thank you, Dr. Nanzetta. We look forward to working with you in developing these cooperative ideas. I thought the opening statements were excellent.

We're going to run the five-minute clock on ourselves as well as on you.

Ms. Brown, let me start with you, if I might, to ask you whether you feel that small business associations were adequately involved in the development of EPA's guidelines for States under the 507 program?

Ms. BROWN. I would say yes, they were. My office helped the Office of Air Quality, Planning, and Standards develop the guide-

line. The Agency held a public hearing. The guidelines were mailed to the trade associations to obtain their input and we asked them to appear at the hearing. I guess 17 or so trade associations did appear at the hearing and provided their comments on the guidelines for section 507.

Senator LIEBERMAN. Good. With that many organizations I know it's hard, but can you pick out what some of the main concerns of the small business groups were?

Ms. BROWN. Well, some of the main concerns of the small business groups were adequate funding for State programs.

Senator LIEBERMAN. Adequate funding to comply with the law?

Ms. BROWN. To comply with the law, and for the States to have funds to get their programs up and running. Confidentiality also was one of the concerns that they had.

Senator LIEBERMAN. Could you talk a little bit more about that? How did they mean, confidentiality?

Ms. BROWN. Small business had concerns, if they would call EPA to get assistance, and their being enforced against if they had some kind of noncompliance issues, the Agency thought small business wanted to be exempt from enforcement, and we attempted to work things out through the guidelines, and through our Agency.

Senator LIEBERMAN. That's the same dilemma that Mr. Watson spoke about?

Ms. BROWN. Exactly.

Senator LIEBERMAN. How does the business avoid being punished for seeking help?

Ms. BROWN. In our agency we have the Office of General Counsel involved in this issue. It's the agency's policy not to grant any kind of immunity, and we understand that the small businesses really aren't looking for immunity, just time and how to comply.

Senator LIEBERMAN. Let's just focus in on that for a minute because that is a recurring problem. It's not just a question of being punished for seeking help; it's a question of being punished for seeking help in complying with the law, but there is an obvious problem of what you do about past behavior that is not good.

Mr. Seitz, do you want to talk about how you've tried to begin resolving that?

Mr. SEITZ. Yes. I think that has been a longstanding issue within the agency. We run into that same issue in a lot of the research we do. You're doing research and a company is cooperating with you and you find a violation, and you want to prosecute someone for cooperating with you—the same process applies here.

I think the agency has taken the position that, as a general rule in its enforcement programs, to the extent that there is a voluntary disclosure of information to the agency that is made in good faith with respect to trying to comply with the law, the agency takes that into consideration and exercises a great deal of prosecutorial discretion in deciding what the response should be.

There is a perception generally that if a violation is detected and it is reported to the agency, all of a sudden all of the enforcement powers that the agency has are going to come to bear on the small business. In fact, I think the record would show that is not true, that we try to exercise discretion in a way that balances both sides of the equation.

It is a difficult question for the agency. As you suggest, you can't just walk away from it, but at the same time we need to do a better job of communicating that side of the policy, that we do exercise discretion.

Senator LIEBERMAN. Mr. Watson, why don't you enter this discussion here and talk a little bit about it? You cited that as one of the three main concerns that you are finding in the small business community in compliance with the Clean Air Act.

Mr. WATSON. Yes.

Senator LIEBERMAN. Just talk a little bit about what you are hearing, and then about what your suggestions are for overcoming the problem.

Mr. WATSON. Well, there are really two ways of looking at the issue. One is from the concern that you hear about small businesses saying, "I don't want to be an outlaw; I want to comply, but I'm worried about how I go about complying, because I'm worried that once I call the regulator, that it really will be a situation of" Hi, I'm from the Texas Air Control Board and I'm here to help you' kind of situation."

[Laughter.]

Mr. WATSON. And so you have that. But the second part of it is the focus on just cleaning up the air. If you focus on cleaning up the air, there are a lot of businesses out there that want to be a part of doing that, but we need to make sure they understand that that's our primary motive as opposed to just nabbing people who may be polluting for the sake of collecting penalties.

Senator LIEBERMAN. That's well-stated, and that's really at the heart of the change of focus that is reflected in this committee and throughout the environmental community, to try to go toward pollution prevention instead of command and control.

So how are you getting that message across?

Mr. WATSON. We're trying to do it in a number of ways. One is, without fail, in any program we try to put on or in any communication with small businesses, we try to let them know what the law requires. We also try to let them know that not only are we providing services through our ombudsmen, but if you come to us, we are trying to be creative in our approach to punishment, to penalties. As I say, we have a confidentiality rule where if they call our ombudsman—who I am happy to say is with me today, Tamara Oberman from Austin—if they call our Ombudsman's Office for help, that's independent. That stays independent. She doesn't report to anybody at the agency.

In addition to that, we at the agency have changed our penalty policies.

Senator LIEBERMAN. You've used the phrase "creative." Tell me about the penalty policy. Tell me what that means.

Mr. WATSON. We refer to it as part of our "minor source policy." If the small business meets certain requirements—in other words, it is a minor source; and in addition to that they have a situation where it's not a knowing violation, it's something where they are out of compliance, or that they've heard that they might be out of compliance, and they have come to us—they won't be penalized for their first-time violation.

In addition to that, we are trying to create a creative penalty policy where instead of the penalties depleting their resources and going into State coffers, those monies might be able to be used to buy the technology necessary to get them into compliance.

Senator LIEBERMAN. Let me ask this, and then I will yield to Senator Chafee.

Mr. Seitz, does what Mr. Watson has just described come within your definition of prosecutorial discretion? Or does it go beyond?

Mr. SEITZ. I totally agree with what's been said and share it. As a matter of fact, part of the problem here is the "black box," and it sounds like the State of Texas has the same problem that EPA has with the black box enforcement. What is it? We need to communicate more, because a lot of the same policies that Texas is talking about having in place, we have in place, and will allow offsetting in some laws in some areas to do that. So we need to communicate much better. I totally agree with that.

Senator LIEBERMAN. So I take it from EPA's point of view you don't have any objection to the policy that Texas is following, where when a small businessperson calls the Ombudsman's Office, they are given confidentiality; they are given a kind of immunity for the moment, if I can put it that way?

Mr. SEITZ. I think there's a distinction we would have, and I think it's in terms of how the problem was submitted. If the problem was submitted in connection with one of the audits that the program did, and that data was treated as confidential, we would have problems with that because that's treating violative information that is confidential within the Federal program.

As I understand what has been presented, there is a call that is a voluntary disclosure made to the ombudsman, which is then held confidential. That is under Texas' policy, and we would not have problems with that.

Senator LIEBERMAN. OK, thank you. That's interesting. Senator Chafee?

Senator CHAFEE. Senator Kempthorne was before me.

Do you want to go first?

Senator KEMPTHORNE. No, you go ahead.

Senator CHAFEE. Thank you, Mr. Chairman.

Let me see if I understand this situation. You have a small business; let's take a dry cleaners, or it might be a truck painting shop, four or five employees. Would a dry cleaner know that he is possibly emitting toxic emissions? How is he going to know that? How would he find out?

Maybe Mr. Watson or Mr. Dunlap can answer that.

Mr. DUNLAP. Through trade associations, for example. In California we do a lot of work with Chambers and trade groups, very active and aggressive with them, and with speakers' bureaus, and also through inspections. The people are out in the field identifying sources like this.

Senator CHAFEE. OK. So then he goes home to his shop, having attended the National Dry Cleaning Association meeting in Las Vegas—

[Laughter.]

Senator CHAFEE.—so how does he then calibrate what his emissions are?

Ms. Brown, do you know? How does he do that?

All right, Mr. Seitz. Don't be bashful.

Mr. SEITZ. No, I won't be.

Senator CHAFEE. The clock is ticking.

Mr. Seitz. OK. Let me suggest that the dry cleaner is an excellent example. There are some 31,000 dry cleaners in this country, and in fact we have proposed a title III standard with respect to that industry segment.

I think what the agency has adopted, which we talk about in my testimony, is a new way of doing business with the regulatory process. The first thing we did was contact the major trade associations—

Senator CHAFEE. OK, you contacted the trade associations. My man is now very aware that he might have toxic emissions. Is there some kind of an instrument that is available for him to calibrate what his emissions are? If he's less than 10 tons of toxics, or 25 tons overall, he escapes, doesn't he?

Ms. Brown—yes?

Mr. SEITZ. Under that threshold, yes.

Again in sensitivity to small business, in the proposed rule any dry cleaner with gross sales under \$100,000 was exempted from the rule when we proposed it.

Senator CHAFEE. No matter how much he emitted?

Mr. SEITZ. That relationship was the sales related to the use of perc. The toxic chemical in that case was perchlorethylene, and that was measured as a volume of sales as far as the use was concerned.

Senator CHAFEE. OK. So now he's bigger than that. My question is, say he's got \$300,000 in sales a year, how does he know that he might be emitting over 10 tons? How do you gauge these things?

Mr. SEITZ. Again, I think the important relationship—and I may let Texas or California comment on that—we think it is important to develop the linkage between these technology clearinghouses, as I talked about before. We have an emission measurement—

Senator CHAFEE. Let's just take the dry cleaners you go to. He has gross sales in the year of \$300,000. You walk in there and he says to you, "Mr. Seitz, I want to be a good citizen. How do I know whether I'm emitting more than 10 tons? Don't send me to some guy in California, to some agency in California."

Mr. SEITZ. Again, to the extent of where he is located, I would—

Senator CHAFEE. He is located in McLean, Virginia.

Mr. SEITZ. He would call the Small Business Assistance Office in McLean, Virginia, and hopefully would get an answer to his question.

Senator CHAFEE. Is that what he has to go through?

Mr. SEITZ. At this point in time, either through that, or hopefully a local association could answer his question.

Ms. BROWN. I'd like to speak up, Senator.

We have a toll-free small business ombudsman hotline, where the dry cleaner can call in and get information.

Senator CHAFEE. All right, what kind of information do you give him? "I have a shop in McLean. I've got \$300,000 of business a

year. I'm a very fine, conscientious citizen who is worried about air pollution. What do I do?"

Ms. BROWN. Well, EPA has regulations. We would send him out the regulations in easy-to-understand layman's terms so that he can read through the regulations and see if he meets the qualifications and needs to comply.

Senator CHAFEE. Well, tell me what the simple regulations are. Would they say, "If you are using X gallons of perc, you are therefore, for sure, emitting Y pounds of toxic emissions"? Is that the way it works?

The idea of some dry cleaner receiving simple technology instructions would make me, if I were a dry cleaner, shudder.

Ms. BROWN. It does depend on the amount you use, Senator.

Senator CHAFEE. What else does it depend on, other than the amount?

Ms. BROWN. The technology that they're using.

Mr. WATSON. I was just going to say, any of the dry cleaners, or other small businesses——

Senator CHAFEE. Stick to dry cleaners. Don't move an inch.

Mr. WATSON. OK, I'll stick to dry cleaners.

Senator CHAFEE. I'm getting this guy squared away. I talked to him this morning on my way in.

[Laughter.]

Senator LIEBERMAN. Let me just say that Senator Chafee's shirt looks magnificent this morning.

[Laughter.]

Senator CHAFEE. If I give him an answer, he's giving me \$25 in free dry cleaning.

[Laughter.]

Senator CHAFEE. But I'm having trouble.

Mr. WATSON. Sure. One of the comments made earlier was about trade associations. This is one of the strongest groups in terms of coming to us and saying, "We need help." But let me address part of your question.

One of the things that we concentrate on with regard to reducing emissions, regardless of whether they have monitored or whether we have come out and monitored, or whether some sort of modeling has been done to determine what their emissions are, whether or not you're looking at how much product they are producing or using, is the technology available to reduce the emissions from that type of business?

Senator CHAFEE. Well, my time is up.

Let me just say this. My friend isn't going to invest in technology if he doesn't exceed the limits. I'm having a terrible time getting from this distinguished group how one finds out what one is emitting.

Mr. WATSON. Well, there are estimates that can be made. If you're not going to actually monitor for it——

Senator CHAFEE. Oh, he's prepared to monitor; he doesn't know how to do it. How would he do it?

Mr. WATSON. In our State he can receive assistance for us to help him monitor, and that will give you some feel for it. In addition to that you can make some estimates based upon the type of business he is running and the type of technology he uses.

Senator LIEBERMAN. Mr. Dunlap, do you want to try to answer Senator Chafee's question?

Mr. DUNLAP. Senator, you can determine it based upon usage of chemical—for example, recordkeeping. So it's not a mystery. Not everything has to be monitored at the stack. In California in particular, in one local district that I am familiar with, they submit records on how much perc they use, frequency of use, how they recycle it, etc., and then you can determine what the emissions are. Based on the various thresholds that you outlined a moment ago, if they exceed it they might require one type of permit; if it's under that, they wouldn't require a permit at all. So it's not a mystery. Based upon the recordkeeping requirements you can get an indication very clearly of what the emissions are.

Senator CHAFEE. Thank you very much.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Thank you.

Senator Kempthorne?

Senator KEMPTHORNE. Mr. Chairman, thank you very much.

Mr. Watson, if we had five of your small business people from Texas seated at that table, what attitude would they be expressing about this program?

Mr. WATSON. I think they would start off by telling you with very wide eyes, "It's going to be almost insurmountable and impossible for us to meet the requirements of the Federal Clean Air Act," with great fear. I think that would be the initial response.

I think they would then tell you that Texas' response, working within the Federal Clean Air Act and section 507, has been a very positive step in the right direction.

The third part of their response would be what I was indicating in my prepared comments. They would say, "Even though Texas is now really trying to provide us with a lot of information and they are trying to be imaginative, one of the things that we run into a problem with is, where can we get the money to do this? We've got to have help, because we're also concerned about the technology. Is there technology there that we can get our hands on?" The bottom line becomes a very important part.

I think they would tell you that they need help from a financial standpoint. That is the single greatest thing we hear.

Senator KEMPTHORNE. Do you think, as we pursue this, that it may lead to some of those small businesses going out of business?

Mr. WATSON. I think there is a real possibility of that happening. I think there is also a probability that some will, because the financial backing will not be there. That's one of the reasons that I mentioned that with regard to our Small Business Administration loan, I see targeting some of those loans to small businesses for pollution control technology being one of the places that the United States can get the biggest bang for its buck, because not only are you maintaining those businesses in operation with the jobs that will be there and the impact that it has on the economies of the States, but in addition to that it cleans up our air, and it focuses on the value of the health of our people and the value of our natural resources.

But the direct answer to your question is, unless we start providing some imaginative approaches to providing that financing, and

some technology transfer—for example, in the private sector, making sure that there's information about good environmental technology that works in larger industries and how we transfer that to the smaller industries and do it in a way that is cheaper? We're going to have some problems with our small businesses.

Senator KEMPTHORNE. I appreciate your term, "an imaginative approach." Do you have any suggestions for us as we contemplate the big picture? What are some imaginative approaches that we ought to be considering?

Mr. WATSON. Perhaps it comes down to a definition of the term "imaginative," but it seems to me that it would be imaginative, certainly based upon our current view of the world and our traditional conceptual framework for analyzing how money gets loaned out, if we would focus less on whether or not, if you buy that piece of pollution control technology, it will actually make you produce more money in your business so that you can pay that back. Our financial institutions don't seem to understand that.

In addition to that, our Small Business Administration ought to be doing that. Another imaginative approach would be some sort of loan guarantee type of program that creates some sort of incentive for financial institutions to loan this kind of money. Many times when we talk to financial institutions they will tell you that they are not interested in loaning that kind of money; "But, you know, if the State would step in and make sure we get paid back—".

I'm not going to give you a specific example, but there has got to be some way that we can create the incentives for the financial institutions to go one step further and make those.

In addition to that we talked about the Technology Centers. I think we ought to be creating incentives for those centers to come up with environmentally sensitive products and better types of technology. It has only been in the last five years that this country has realized that there is money to be made in environmentally sensitive businesses, and if we could create incentives for that, then it would help us in controlling the pollution for the small businesses.

Senator KEMPTHORNE. Mr. Chairman, could Mr. Dunlap respond to that?

Mr. DUNLAP. If I could just add, I think the core of your question is, what types of things could be offered to the diverse small business community? Obviously there is a responsibility for States like California to educate the sources, to have clearly defined rules and regulations, to demystify the process, to share information about pollution prevention programs and technology transfer, and to provide some leadership in getting people to comply and helping them to comply. We have a technology development program in California that has been very helpful at demonstrating newer, better, cleaner ways for small businesses to operate. We need to do more of that. But to sit here and say that you can offer Program X for all small businesses, you cannot, because they are varying stages of understanding of environmental challenges. Some smaller businesses, particularly in California, we started regulating in the last two or three years, so there is a learning curve.

But the direct answer would be a diverse package of services, including education, loan guarantees, technology transfer information, and pollution prevention information, as well.

Senator KEMPTHORNE. Thank you very much.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Thank you, Senator Kempthorne.

Let me pick up on this exchange, because I think it has been a good one.

Based on previous hearings that the committee has held on the general subject of pollution prevention, not only is it a more affirmative way to go at the relationship between Government and business regarding environmental protection, and ultimately a more productive way for the environment, but the testimony, much to my surprise and pleasure initially, is that it is also good business for the businesses—one, in the sense that you say, Mr. Watson, which is that there is a market for environmental technologies; but as one of the companies said, "Waste is a sign of inefficiency." In other words, the less waste we're producing, the more cost-efficient we are, the more savings for our business.

You correctly said it, and I find it in Connecticut. The first reaction of a small business is "Oh, my God, another headache from Washington. I'm out here working 12 to 15 hours a day to make a living, and now you're going to give me another burden to make it more difficult?" That's where there is a real need for education and assistance to make the point, which is that if this works right, it is going to allow the business to function ultimately more efficiently.

Dr. Nanzetta, I want to bring you into the discussion here. I am a big supporter of the Manufacturing Technology Centers. I think you've done a real good job and I see real potential here.

In your testimony you mentioned the goal of turning these centers—as they expand, hopefully—into places of one-stop shopping for small businesses across a wide array.

Having heard this exchange, which is typical of the interrelationship between Government and small business, is there a constructive role for the Manufacturing Technology Centers in trying to deal with some of the problems that have been described here that small businesses have with environmental complaints?

Mr. NANZETTA. Definitely. One of the most difficult problems for a small business is to understand what the requirements are that are placed on them and how to assess where they stand with respect to those requirements. So if the Manufacturing Technology Centers or other extension centers can, one time, figure out what the requirements are for a particular industrial sector and have some reasonable way of making measurements with respect to that, then they can go in and help a company see where they are and they can make recommendations to the company about the kinds of changes they can bring in to bring themselves into conformance.

I think that will take a focussed effort in the category that I call "technology sources," which provide a kind of technology extraction or packaging function to feed into the extension services so that they will have the tools that they need to carry that out. That function doesn't exist right now, but I think there will be opportu-

nities to begin building that through some of the Defense conversion projects that I expect to see coming in soon.

Senator LIEBERMAN. It's seven centers you have now?

Mr. NANZETTA. Seven.

Senator LIEBERMAN. At the seven centers you have now, are the small business people asking questions—I believe you testified to this—they are already asking questions about environmental complaints?

Mr. NANZETTA. That's right. In some cases the MTCs are working quite closely with the State environmental agencies. In California they are, and in Ohio they are. They are already working effectively with small companies, but they are doing it on a case-by-case basis and not on a Nationwide systematic basis in providing packaged solutions for people to work from.

Senator LIEBERMAN. Do you think it is important to make assisting the centers an explicit part of EPA's mission, perhaps legislatively?

Mr. NANZETTA. I think it might offer encouragement to something which is already beginning to take place. We have found a surprising degree of receptivity and willingness to cooperate when we have talked to other agencies to try to bring common solutions to problems, and that includes EPA. In fact, the thing that has limited us more than anything else is our own time and resources and capacity to go out and meet people and talk to them and start working on that, much more so than any lack of enthusiasm on the part of the agencies. There has been quite a degree of enthusiasm.

Senator LIEBERMAN. Good.

I want to ask you to think about—and perhaps submit in writing to the committee—suggestions about the ways in which the committee and the Congress can assist in enabling “the best possible working relationship,” as I think you used in your statement, between the centers and other agencies, including EPA.

Mr. NANZETTA. I would be happy to do that.

Senator LIEBERMAN. A brief response from Mr. Watson or Mr. Dunlap at the State level about the potential that you see, your reaction to the possibility of these Manufacturing Technology Centers getting involved in helping you carry out this responsibility to small businesses.

Mr. WATSON. I think it is a very positive step and one that we would welcome seeing. We would find it to be a great help.

Senator LIEBERMAN. Mr. Dunlap?

Mr. DUNLAP. I would concur. We are very enthusiastic in California about the Federal funding we have received from the National Institute of Standards and Technology to set up an MTC.

The bottom line is, we need to see technology developed in order to make businesses more efficient, as you said. Inefficient waste streams indicate that there are some problems.

Senator LIEBERMAN. OK.

I am going to yield to Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Just a quick question to Mr. Nanzetta. I don't know who set up these seven Manufacturing Technology Centers, but the northern States certainly made out: Michigan, Minnesota, and Ohio all to-

gether, and none across the entire southern band of States. How did that work out? Was it politics?

Mr. NANZETTA. They were awarded on a strictly competitive basis based on proposals which came forth. We see a much higher proportion of proposals for assistance in manufacturing from those States which have experienced problems with the departure of their manufacturing base for a longer period of time, and have therefore developed a State infrastructure which supports a proposal coming in to us. It's done strictly competitively. We use a National Academy of Sciences review panel for technical review of proposals, and they are awarded on the basis of merit.

Senator CHAFEE. These are permanent sites, aren't they, now?

Mr. NANZETTA. No, sir. The current legislation has a six-year sunset.

Senator CHAFEE. How about the facilities? There must be a facility there, isn't there?

Mr. NANZETTA. There are physical facilities, right.

Senator CHAFEE. Physical facilities.

I must say that from this testimony I have gathered that the trade associations are extremely important. The point Mr. Watson made is obviously one that we are very deeply interested in on this committee, and that is pollution prevention. It is much easier to stop the pollution from occurring than to try to clean it up afterwards.

I take it that there is an association for every industry. Is there a truck painters' association? Do they go to meetings somewhere?

Senator LIEBERMAN. Did you visit them this morning, too?

[Laughter.]

Senator CHAFEE. No, they're on for 3:00 o'clock this afternoon.

[Laughter.]

Senator CHAFEE. Then I presume that in the magazines or newsletters or whatever they have for their organizations, there are ads about how to reduce the pollution in one's plant.

I look forward to hearing from the next panel, which I believe is made up of those who are actually from the associations.

Thank you all very much. I just want to express my appreciation.

Senator LIEBERMAN. Thank you, Senator Chafee.

Senator KEMPTHORNE?

Senator KEMPTHORNE. Dr. Nanzetta, I believe you are pointing out in your comments that small business doesn't always know how to access new technology?

Mr. NANZETTA. Right.

Senator KEMPTHORNE. And we hear the term "technology transfer," which I think is that often technicians don't know how to communicate what assets they have. So a matchmaker is missing. How do we get beyond technology transfer just being a catch-all phrase that tries to make us feel good, when it really is not accomplishing what we would hope that it would accomplish?

Mr. NANZETTA. That's a very real issue. The Manufacturing Technology Centers have on an average of 25 field agents each. The field agents have eight to ten years' experience in manufacturing, many with small companies, so they understand the needs of the companies as they go in to work with them.

For them, the technology transfer is to try to acquire technology from other sources that are needed by the companies, whose needs they understand fairly well.

Senator KEMPTHORNE. As a particular example, in the State of Idaho we have a National Engineering Laboratory. We often talk about technology transfer, but it really is not happening. Have you learned in the process with your Manufacturing Technology Centers some key elements that would help the National Laboratories of this country to start being more successful at technology transfer?

Mr. NANZETTA. I think that they have some significant obstacles to overcome in doing that, and at the same time they are very highly motivated and very much interested in trying to overcome those obstacles. One is the tradition of security that has surrounded the National Laboratories. Second is the manufacture of unique products where the performance matters much more than the cost, and this is common across the whole defense conversion issue, as well.

So there may well be superb cutting-edge technology being used in those facilities, but without the same commercial pressures of bringing down costs and reducing cycle time in manufacturing and so forth that you need in order to succeed in the commercial world. I think the National Laboratories are making progress in that direction.

To me, a more appropriate model than asking those laboratories to directly transfer technology to small firms, however, is to view them as technology sources within a whole national program, where the work with the small firms is done through extension and technical assistance providers who are able to draw on this special technical expertise of the laboratories. Therefore it is a two-stage process, if you wish. We have begun to have some experience in working with National Laboratories, like Oak Ridge and Sandia and Livermore, in carrying that sort of model out.

Senator KEMPTHORNE. All right. Thank you.

Mr. Watson, you may have already mentioned this, but you talked about your creative penalties. Can you give us a couple of instances of what those might be?

Mr. WATSON. Well, an example might be dry cleaners.

Senator CHAFFEE. Good example.

[Laughter.]

Mr. WATSON. A situation where you have a dry cleaner that needs new technology and is out of compliance—normally, they would be subject to a penalty of X thousands of dollars. We could collect that penalty, and they might go out of business at that point because then they don't have the money to use that X thousands of dollars to put the technology in place. One creative way would be where we don't require them to pay the penalty, the money penalty, but what we do is, we require that technology be put into place within a specific period of time and let their money go to cleanup as opposed to just putting it into the State coffers. That's one example of where we would be creative.

Senator KEMPTHORNE. OK, I appreciate that.

Mr. Seitz, how much flexibility are you prepared to give States like Texas in their efforts to adopt creative penalties when sanctions are appropriate for noncompliant businesses?

Mr. SEITZ. I think in terms of the agency's oversight of its compliance efforts, one thing that we have constantly looked for,—and I believe that Texas is saying that they have set forth a stated policy that this is how they intend to carry out their penalty programs in situations such as this dry cleaner—to the extent that policy is documented and understood by the EPA or the Regional Offices up front, and the agency understands it, I think that generally the agency will accept it.

Senator KEMPTHORNE. Mr. Chairman, may I just ask one final question on that?

Senator LIEBERMAN. Sure.

Senator KEMPTHORNE. EPA is partially funded, is it not, through penalty payments for noncompliance?

Mr. SEITZ. No, sir.

Senator KEMPTHORNE. It is not?

Mr. SEITZ. I am unaware of any such funding mechanism—most of the penalty funds that are collected by EPA go straight back to the U.S. Treasury.

Senator KEMPTHORNE. OK. Thank you very much.

Senator LIEBERMAN. I have two quick oversight questions, Mr. Seitz, before we go on to the next panel.

The first is that the act requires that programs under 507 be submitted within 24 months of the law's enactment, which would have been November of 1992, but the law is silent on when the programs are supposed to be fully operational. I know that EPA has given the States two more years, until November of 1994, to put the programs in place. Clearly a number of States, as you have indicated, have them in place and they are at least partially operational; certainly, Texas and California are.

The question is, why allow the other States to wait until 1994, since some of the regulations affecting small businesses will be effective before then? In some ways this goes to Senator Chafee's question about his dry cleaners. They are going to begin to need access to information and help probably before 1994.

Mr. SEITZ. There are two reasons for that. You are correct in terms of some States having the program in place early, particularly the Small Business Ombudsmen in a number of States. We have encouraged that to be done first and foremost.

As of November 15th, 1992, the States were to have submitted the program to the agency. For those States that did not, in January the agency issued a finding order to the States saying that they had to get them in to the agency within 18 months. As I said in my testimony, I believe they will all be in. So in terms of fulfilling its obligation to ensure that those plans come in, the agency has followed the statutory mechanism.

With respect to the implementation, the logic of the November, 1994 implementation of programs, that is also tied to the start-up of the Federal Title V permit program, which also is activated in November of 1994 with the first permit fees being collected. Those permit programs have to be submitted in November of 1993, this

year. The agency has a year to approve those. To the extent permit activities take place, they will take place in November of 1994.

What you now see in a number of States, and I think it's a result of the communication going on between EPA and the States in this program, is realizing the confusion, as has been stated here, in all of these programs for small businesses that have chosen to activate those programs early. We encourage and support early activation; in fact, we are having workshops among States that have programs in place to try to encourage them to start early. We are having one of those later this year in North Carolina, as well as the first national meeting of all State Ombudsmen in the fall of this year. So we fully support and agree with the principle of early implementation and are trying to foster that. But the implementation in November of 1994, the absolute date, is tied to the start-up of the Federal Title V permit program.

Senator LIEBERMAN. Understood.

Let me leave you with this thought, and if you want to comment on it, you are welcome to.

As I indicated in my opening statement, this 507 program under the Clean Air Act is a first step, and I think there is a lot of interest on the committee in considering similar parts to other substantive environmental legislation that comes along in this session regarding water or waste.

My question to you is, how are we going to be able to measure results here? What are the performance standards as we consider whether we want to expand this idea? Is it the number of businesses we reach out to? Is it the amount of pollution prevention? Those are questions that I would like you to consider as we go along, because we are going to come back and ask them. If you have some answers now, fine.

Mr. SEITZ. We have thought about that. I think clearly the program has established the Advisory Panels to be that exact measuring stick, and they will report back into Karen's office with an assessment of the program.

I think there's no question in my mind from what you've heard here today, there is a need for the dry cleaner to understand these regulations. The more we can do to put together technology transfer information, to get it into the hands of the State Small Business Ombudsman—my experience is that they do not like to call Washington; they do not like to call EPA, but they will call the Small Business Ombudsman, because that is their friend, their ally.

To the extent that we can get valuable, understandable—and I stress the word understandable—information in the hands of that office, we have gone a long way. I think just based upon the phone calls into Karen's office and into the bulletin boards, anything the agency can do to foster that is positive.

With respect to the remainder of the program, I think only these panels will be able to answer that question.

Senator LIEBERMAN. Yes. The volume of the calls is, to me, very impressive. Ms. Brown, you have more than 20,000 calls a year coming in, and you have more than 50,000 to your bulletin board. It says that people out there are either terrified, which may be a big part of it, or at least they care enough and are worried enough to want to reach out to you for help.

We want to keep in touch with you. I thank this panel. You have been very helpful. The truth is, just to say it so that I don't leave it implicit, you are really on the front lines of trying to make into reality the rhetoric that has become very fashionable in Congress, which is to create a more constructive, affirmative, less command and control, less punitive relationship between environmental regulators and the business community, particularly the small business community. So I suppose we put a lot on you, and we appreciate the efforts you are making in that direction.

Thanks very much.

I will call the second panel now: Benjamin Cooper, Senior Vice President for Government Affairs, Printing Industries of America; Scott Backus, President of Har-Conn Chrome Company of Hartford, on behalf of the National Association of Metal Finishers, accompanied by William Sonntag, who is Director of Government Relations of that group; Dr. Manik Roy, Pollution Prevention Specialist of the Environmental Defense Fund; and Mr. Tom Carvalho, Vice President of Chem-Tech Rubber in New Haven, Connecticut.

We welcome this second panel. You are the folks on the other side of the relationship. We very much look forward to hearing from your perspective how it's going and what we can do to help you not only comply with the law, but stay in business and perhaps even make a good living, which is consistent with our aims here, as well.

Ben Cooper, you are first.

**STATEMENT OF BENJAMIN Y. COOPER, SENIOR VICE PRESIDENT
FOR GOVERNMENT AFFAIRS, PRINTING INDUSTRIES OF AMERICA, INC., ALEXANDRIA, VIRGINIA**

Mr. COOPER. Thank you, Mr. Chairman, members of the subcommittee. I want to thank you for the opportunity to appear before you today. My name is Benjamin Y. Cooper. I am Senior Vice President for Government Affairs for the Printing Industries of America. I also appear today as Chairman, Environment Committee of the Small Business Legislative Council, which is a permanent coalition of more than a hundred small business trade associations throughout the United States. We are pleased to have the opportunity to address the Small Business Compliance Program of the 1990 Clean Air Act reauthorization and some other small business compliance challenges.

By 1987, representatives of our association, the Small Business Legislative Council, the American Furniture Manufacturers Association, and the National Federation of Independent Businesses began meeting to discuss ways we could assist our member companies in dealing more effectively with the anticipated Clean Air Act reauthorization. Our efforts led to the development of section 507 of the act, the Small Business Compliance and Technical Assistance Amendment.

Of course, like any program of this type, it is only valuable if it is properly implemented. While it is too early to determine if the program is a success or not, we believe the program is not being properly implemented. The Small and Disadvantaged Business Office of EPA has done a terrific job of attempting to have the pro-

gram implemented properly; however, I cannot give the same endorsement to the agency as a whole.

The central problem I see with the agency's treatment of section 507 is that educational assistance simply does not have the same value at EPA as enforcement. At the State level we are aware of several States that are evidently attempting to put the program in place: Texas, Indiana, California, and New York, and I would say that I had that list before I knew who was appearing with me, so I was glad that the coincidence was there. These are examples of States where our members are aware of such efforts, but the outreach to the small business community at the State level has been slim in most cases.

I am not sure that all the problems of small business can be addressed by programs such as section 507, but we feel there are improvements which can be made to make such programs more useful. As an example, adequate funding must be made available to enable EPA to work with the States to develop compliance assistance programs. As an example of that, in the first year of section 507, only \$1.3 million was appropriated for the entire implementation nationwide.

EPA must be given proper incentives by Congress, and in turn, EPA must give incentives to the States to implement programs such as 507. In the early stages of the development of section 507 we had recommended, for example, that the States be given air emission reduction credits for implementing the proper small business program. Small business issues must be given proper standing at EPA; perhaps raising the profile of the Small Business Office at would help that effort. We would support your suggestion to elevate the Office of Small Business in the Administrator's office.

Finally, the Congress and EPA must understand how far down the business scale regulations have gone. Companies with 10 employees are now subject to vast reporting requirements. Companies with 20 employees are major clean air sources. Companies with fewer than 50 employees are part of Superfund actions. They are required to file State and Federal right-to-know reports, and they must find waste haulers and disposal sites, the same as the largest companies. However, few of these smaller firms can afford environmental specialists to keep up with the regulations.

I would now like to take a few minutes to discuss some of the current environmental concerns of small business and provide some recommendations for making life easier.

There are simply too many Federal reporting requirements. Our association did a study a few years ago of reporting requirements and we determined that there were at least 46 Federal environmental reporting requirements that a small printing firm would be subject to. We believe it is possible to have a single annual environmental report for the majority of small businesses, which would provide the Federal Government with all the information it needs from small business.

Environmental regulations must also be cross-media, and State and Federal regulations must be integrated.

Also, Mr. Chairman, we need to put liability in its proper context. I do not believe the Congress ever intended small business to be as immersed in the Superfund program as it is. No one disputes

the rationale for sharing the cleanup costs; to a small businessperson, it is the lack of predictability and the realization that they are involved in something totally beyond their control that causes the problem.

The subject of waste disposal is a particular problem for small businesses. Congress could assist small businesses in the waste disposal area by allowing them to pool their efforts to contract for waste haulers, and by charging a simple fee to cover liability if a properly managed site of today becomes improperly managed in the future.

We appreciate your taking the time to hold these hearings. During the debate on Clean Air Act reauthorization it was difficult to raise the level of awareness of small business concerns. Your efforts today represent a real turning point. Small business is not seeking an exemption; we are not seeking a way out. We are seeking a rational, cost-effective way to provide our customers, employees, and communities a cleaner, safer, and more profitable workplace.

Thank you very much.

Senator LIEBERMAN. Thank you, Mr. Cooper. I appreciate the content and the tone of your statement.

Mr. Backus, welcome. Thanks for being here.

STATEMENT OF SCOTT BACKUS, PRESIDENT, HAR-CONN CHROME COMPANY, HARTFORD, CONNECTICUT, ON BEHALF OF THE NATIONAL ASSOCIATION OF METAL FINISHERS, ACCOMPANIED BY WILLIAM SONNTAG, JR., DIRECTOR OF GOVERNMENT RELATIONS

Mr. BACKUS. I have to tell you first that I am absolutely overwhelmed to be here today. I am overwhelmed to find out that I share a personal agenda with my Senator from the State of Connecticut, and further overwhelmed to hear the remarks from Senators Chafee and Kempthorne. My faith in the Congress is definitely renewed today. I thank you very much.

Senator LIEBERMAN. Thank you. I would guess that in America you are in the minority—

[Laughter.]

Senator LIEBERMAN.—but we appreciate that, anyway. It's encouraging.

Senator CHAFEE. I'm not sure what has given you such confidence. Was it that we could put three words together in a sentence?

[Laughter.]

Mr. BACKUS. My name is Scott Backus. When you hear me today, I hope you hear a symphony of voices. I speak for the National Association of Metal Finishers, and with me today is William Sonntag, our Governmental Director. I serve on the board of the Connecticut Association of Metal Finishers, and as a part-time job I run a family owned business in West Hartford, Connecticut, in which we do metal finishing.

I know this is going to make Mr. Sonntag blanch with fear, but I am going to put away my written comments and address the things I have heard this morning.

I hear, how can the legislature help?

First of all, the 507 program is a good program. It is well-conceived. The problem may be that it needs to be implemented immediately. Part of the problem has to do with when legislation is written, I think things like technical assistance should be thought of from the very beginning, especially when it comes to environmental laws.

Earlier I heard discussed the problem of discovery. Suppose I have a perceived problem with air in my shop and I call the Ombudsman or the regulatory agency, and they come into my shop. We are standing there looking at a chrome-plating tank and what's going on, and here at his feet is some noxious brown foul-smelling liquid pool on the floor, and over in the corner are unlabeled barrels bursting at the seams with something that you wouldn't want to cart home in your trunk.

It would be inappropriate for that person not to comment on those things; and yet, as an air regulator, those are not part of his daily duties.

What we need to do is put all these things together in one package. Air itself is not the answer. Water itself is not the answer. The fear of being discovered is not the answer.

Furthermore, I would like to say that part of the problem has to do with the perception that we have in America today, that I am the environmentalist, you are the businessman; I am the businessman, you are the regulator. I am the regulator, you are the legislator. Perhaps what we need is some kind of oversight committee to bring all these people to a table together. Nothing is fixed forever; one law will not fix the air for eternity. We need to look at it year after year after year and repair it as it goes along, and the people who can do this are the people across the spectrum who are involved in it.

Finally, earlier this morning I heard that there is a dry cleaners somewhere in Virginia that needs some help, and I can help that man. I have been in the regulatory process long enough to understand some of its nuances. As a businessman, I can go to another businessman regardless of what he does to make his living and help him through the regulatory compliance problems that he may have day to day. We need to bring the businessman into the loop along with—as we heard earlier—financial institutions, to make them aware of what's going on.

Finally, you are always supposed to say something cute and make people laugh, so I would like to say that several years ago I had a new bank executive sign on; he wanted to come out and see my shop so that he knew what kind of place he was going to be dealing with. So we went through my shop and I said, "This is environmental, and this is environmental, and this is new environmental, and this is new environmental." In the exit interview he said, "You seem to have such a light manner when you talk about these weighty environmental problems." I said, "Well, it goes this way. I realized that I needed a codicil in my will to say not to bother embalming my body; just bury me, because they're going to dig me up afterwards and slap me in jail regardless."

[Laughter.]

Mr. BACKUS. Thank you very much for the time this morning.

Senator LIEBERMAN. Thank you, Mr. Backus. Your statement was excellent and we will include your written statement in the record of the committee's hearings, so you will get the best of both worlds.

Dr. Roy from the Environmental Defense Fund, good morning.

**STATEMENT OF MANIK ROY, POLLUTION PREVENTION
SPECIALIST, ENVIRONMENTAL DEFENSE FUND**

Mr. Roy. Good morning. Thank you, Chairman Lieberman, Senators. It is an honor to be here.

I am Manik Roy, a pollution prevention specialist with the Environmental Defense Fund here in Washington, D.C.

I would like to focus specifically on the role of environmental compliance and technical assistance in promoting pollution prevention in small businesses, and I know that is an especially high priority of yours, Mr. Chairman.

Mr. Chairman, Senators, let's start by assuming that we want to achieve the highest environmental protection goals. If we're going to meet those goals, we have to implement them in a way that recognizes the realities of the customers of our environmental protection standards, those being the individuals and the businesses that generate waste and may subsequently pollute.

In particular, our environmental protection system has to stop treating each American business as if it were a bundle of smokestacks and drain pipes and not, in fact, a business. While a business may pollute, pollution is incidental to its existence. Its primary concerns and resources are devoted to providing a service or manufacturing a product.

On the other hand, because pollution is incidental, a business might misunderstand the extent of its problem, or even deny to itself the extent of its problem. It may choose pollution control technologies that cost more than they should and protect human health and the environment less than they could.

Going to the point that Mr. Cooper and Mr. Backus raised about cross-media issues, it may solve one pollution prevention problem, inadvertently exacerbating another. There is a real tendency in our current regulatory program to lead people to do that.

Any environmental protection system that imposes mandates on businesses and hopes to have them fulfilled, the Environmental Defense Fund thinks, should seek to address those characteristics of our businesses.

With some important exceptions—and I think we've heard about some of those today—our current system does nothing of the sort. Regulations are developed specific to a single media, mostly in isolation from the impact to other media. I think the source reduction review project that is in place at the Environmental Defense Fund now is an important exception to that.

Regulations are written primarily to be read by lawyers, again, with some of the exceptions that we've heard about today. There is little guidance given to the business decision maker, by which I mean not just the environmental compliance staff person, but the plant manager, the production supervisor. If you want to get to pollution prevention, you have to be able to put environmental com-

pliance requirements in a language that production supervisors understand. They are the key to pollution prevention.

All this argues for a national environmental compliance and technical assistance program, with three or four particular characteristics. First, the program should be developed along with the environmental protection standards and the compliance enforcement programs as part of a complete package. The process of establishing environmental protection standards we would not consider complete unless there was a way of explaining the requirements in those standards to the business decision maker.

Going to the point one of you made earlier, the question of evaluation, I would add that we don't have a real strong tradition of evaluating the success of environmental programs, and I would suggest that package is not complete unless it has built into it an evaluation component.

Second, the assistance program should address all environmental media rather than focus on any one, echoing what was heard earlier. EDF feels very strongly about that.

Third, the assistance program should give special emphasis to preventing pollution at the source. I think we've heard enough about that today that I won't rehash that too much.

Let me just illustrate my points. This is all nice to say in the abstract, but let me illustrate my points by talking a little bit about a project that the Environmental Defense Fund has put together with the Council of Great Lakes Governors, which represents the Governors all the way from New York to Minnesota, around the Great Lakes.

In this project, the Council of Great Lakes Governors and EDF are going to be picking an industry which is economically and environmentally important to the Great Lakes and is about to see a wave of new regulations coming down on it, whether it be the Clean Air Act, Clean Water Act, or RCRA, and is interested in being an industry partner in this project.

Once having picked that industry, and we're actually pretty close now—having picked that industry, we will put together a team that includes representatives of the industry, its customers and suppliers, labor, the State and Federal regulatory people, the State technical assistance providers, the NIST program—in fact, we have already been working on this project with NIST—and environmental groups, which includes the Environmental Defense Fund and some of our State partners. Before the regulations are put in place we're going to step back and see if there's a way that the regulations can be written, that the permits can be written, that the technical assistance can be provided, the customer specs set, research and development used to address some of the important supply issues—see if there is a way to do all that creates a sort of a “seamless” business environment that makes it easy, makes it sort of a natural flow for that small business to go in the direction of pollution prevention.

If that project is successful, and I hope it will be, I would offer it as a prototype for meeting some of the recommendations that you've heard here today.

Finally, Mr. Chairman and members of the subcommittee, the Environmental Defense Fund applauds your leadership on these important issues and we look forward to working with you on this.

Thank you.

Senator LIEBERMAN. Thank you, Dr. Roy. We thank you for your support and real life effort here.

Talking about real life effort, I am glad to welcome Tom Carvalho, Vice President of Chem-Tech Rubber. Tom came to a meeting that a member of my staff held in Connecticut with small business people, and we appreciated his contribution there. We thought we thought we should take him national.

So Tom, welcome. You are on the front lines.

STATEMENT OF THOMAS W. CARVALHO, VICE PRESIDENT, CHEM-TECH RUBBER, INC.

Mr. CARVALHO. Thank you, Senator. I have to say this: I'm from business, and I'm here to help you.

[Laughter.]

Mr. CARVALHO. I never thought I'd be able to say that on a platform like this, and I am overwhelmed. If I had known better I would have walked in and said, "Isn't this the Smithsonian," and walked out.

I guess I'm an enigma here because I don't represent anybody. I'm just a small businessperson, although I have been very active over the years in Connecticut.

My name is Tom Carvalho, and I am Vice President of Chem-Tech Rubber.

Senator LIEBERMAN. Could you describe Chem-Tech, just as an aside?

Mr. CARVALHO. We are a textile coating facility. Right now we have about 45 employees. We are considered a major source, so the 507 doesn't apply. To me, I have a slight problem with that; not from the technical assistance portion, but from the compliance portion. I don't have a problem complying, but I see it as a problem for small business.

To set the stage I am going to read a portion of my statement.

Senator LIEBERMAN. Fine.

Mr. CARVALHO. Just so you understand where small business is coming from, March 1st has just passed, so the Tier II reporting deadline under SARA Title II has gone by. Connecticut's pre-inspection questionnaire has just arrived, along with a new multimedia form to be filled out and submitted in two weeks. The new emissions statement arrived two weeks and is due April 15th, tax time. Form R is just around the corner, and since all of the above are related, it makes sense to crunch together the data for the July deadline so that there is some uniformity in the reports. RCRA hazardous or State-regulated wastes must be properly manifested, along with the correct land ban forms—"Oh, I think I have forgotten to do my weekly RCRA inspection."

A new stormwater permitting deadline is rapidly approaching; thank God it isn't the year for my biannual report on hazardous wastes. What's this? The Bureau of Census just sent two voluminous forms that are required by law; one was due February 15th,

and one tracking shipments for two particular weeks in March is due by the end of March. Funny, a lot of the data required is something which I've never had to keep track of.

My new minor boiler blow-down and minor noncontact cooling water have just come into compliance, hopefully. Time for some new TCLP testing on my waste and an annual audit of the TSDF facility that I use for my waste, and on and on.

I haven't addressed the Americans With Disabilities Act. I haven't addressed OSHA compliance. I haven't addressed the fact that I may come under compliance with the new HM-181 for DOT. I haven't talked about quality, a product going out the door, or worker's compensation. It is a bit overwhelming, and I think that technical assistance and compliance assistance is necessary.

Scott addressed a lot of things that I was going to say because in Connecticut there is a tremendous amount going on. I look at the small business assistance and I have a problem with that. My problem is that it doesn't address the medium and the large business, and the problem that I have with that is that doesn't address the environment.

Connecticut has a new program tracking the TRI people, the Toxic Release Inventory, that in addition to the 507 that we have in place, sets up guidelines for reductions with those facilities, regardless of size, and I think that's good.

Over the years one of the reasons I tend to think differently is that I am currently the chair of an LEPC, so I understand what the communities are going for and having problems with, with their stormwater and everything else. I am also co-chair of a task force for LEPC guidance to the State Emergency Response Commission, which is—

Senator LIEBERMAN. Could you spell out what LEPC is?

Mr. CARVALHO. Local Emergency Planning Committee.

That put me in contact with people from both the regulated community and the regulators. It was a very good community and we made a very nice document from that. It is showing what can be done when the groups work together.

I will read my closing statement.

In conclusion, technical and compliance assistance programs will become ever more important as regulations increase, both in number and complexity. Their role at the Federal level,; however, is still a question in my mind. Perhaps the job for the national and regional branches of Government is to act as a sort of electronic bulletin board and help the States select the programs best suited for their individual needs.

I would like to see increased cooperation between not only the regulators and the regulates, but also the "environmentalists." You see, I, too, am an environmentalist, and the current economic climate being what it is, my greatest fear is that the great strides we have made at great cost to all over the past 20-plus years will be lost and that we will begin to backslide and lose ground.

Basically, that's it.

Senator LIEBERMAN. Thank you, Tom.

Let me just start with you, because obviously you and Mr. Backus are the people that we're really concerned about.

Unfortunately, the two of you have indicated in your statements that you have a lot of experience trying to figure out how to comply with governmental regulations and statutes, but how are you now going about trying to figure out how to comply with the Clean Air Act? In a sense, if you would, answer the questions that Senator Chafee was asking about what his dry cleaner should be doing now. Who is helping you, if anyone?

Mr. CARVALHO. Well, for the Clean Air Act, basically I think I'm going to have to get a consultant. There's just too much there. I have used sources in the past as consultants. I have used graduate students from the Yale School of Forestry to do pollution prevention and waste minimization. There is a tremendous amount of resources out there that are available if you know how to find them.

The technical programs you're talking about, the seven across the country—see, I'm pretty well networked in Connecticut. It took me five calls to find anybody who was familiar with them. The closest one to Connecticut is RPI.

Senator LIEBERMAN. You're right, we don't have one in—

Mr. CARVALHO. You may, because RPI has a branch in Hartford, the Hartford Graduate Center, so there may be a resource there.

Senator LIEBERMAN. I think following Senator Chafee's questions we're going to be submitting an application for a Manufacturing Technology Center right close to the Connecticut-Rhode Island border.

Senator CHAFEE. It'll be in Rhode Island.

[Laughter.]

Senator LIEBERMAN. I was thinking it would be in Connecticut.

[Laughter.]

Mr. CARVALHO. Senator, I stay pretty close to these things on the environment. I was at a SARA conference recently in Connecticut, and I met a friend of mine who does just the environment. He doesn't do all the different things like I do, because we're so small. He had just gone to North Carolina for a conference on the Clean Air Act. His comments to me were that he was just plain frightened.

Senator LIEBERMAN. You don't think there's anything around that you qualify for in terms of governmental assistance programs to comply? That's why you're going to get a consultant? In other words, the—

Mr. CARVALHO. The problem I have with the assistance programs is that—I don't have a problem with them addressing small business, because they need it, OK? But it should be broader than that and address the environment.

Senator LIEBERMAN. Mr. Backus, what are you doing?

Mr. BACKUS. Are you going to ask me the same thing, sir?

Senator LIEBERMAN. Absolutely.

Mr. BACKUS. Excellent.

I'm complying by turning myself in. That was the easiest way to do it.

Senator LIEBERMAN. Tell me what you mean.

Mr. BACKUS. We filled out a questionnaire prior to Clean Air, and through estimation, because we didn't have direct information—to answer your question about how I know if I'm over the limit, through recordkeeping, etc., we tipped the scale and were

found noncompliant. For the past four months I have been trying to study whether or not I am compliant or noncompliant with chrome air emissions. I am, and I'm not, at the same time, which does not fit the law.

Senator LIEBERMAN. How have the Government agencies been with you on this particular point, or haven't you had much contact with them?

Mr. BACKUS. They have tried to help, but there is a difference in perception between the two areas. Unfortunately, each company does individual work and doesn't always fit the definitions of the law. In this case, in chrome air emissions, I am asked to comply to maximum allowable stack concentration, the maximum amount of chrome I can put up my stack. The chrome comes from the chrome-plating process. Unfortunately, maximum is a relationship to the electrical power I put in it, and my electrical power is very large. However, because of the business I have been in for 45 years, I will take a piece of work the size of the desk here and chrome-plate a very small area on it, because it's for a specific wear purpose. So I generate very little chrome, although that entire part—there's a problem with perception. I am called and asked, "Well, how much work are you going to do next year?" I have no idea. I'm a job shop. I don't know how much work I'm going to do tomorrow. If I were a manufacturer and I had a plating shop within my company, I could tell you, "I'm projected to sell a million parts at such-and-such."

So there are little cracks where businesses fall through, and every business is different.

Senator LIEBERMAN. Mr. Cooper, you said in your statement that outreach from EPA has been slim, but you were generally complimentary of the Small Business Office or the Ombudsman, if I remember correctly.

Mr. COOPER. Yes.

Senator LIEBERMAN. Just talk a little bit more about that. I take it your members in the printing industry around the country are not finding, from Government, the kind of help that we're all talking about.

Mr. COOPER. I think the job for Government is extremely complicated. One of the realities not just of small business but of business is that we are all job shops. I'll just use small business: every one of those businesses is a unique enterprise.

I think it's wishful thinking to believe that EPA or the State agencies will be able to have a comprehension of how to regulate that unique business. In fact, one of the problems that we have with the regulatory program—I often use the example of throwing a blanket over everybody and letting the good guys crawl out. It's extremely difficult to understand what's happening.

We're very fortunate because we have State, local, and regional organizations that we can communicate through, and they in turn can communicate with their members and provide some technical help. We have also been very fortunate to enter into a partnership agreement with 3M to help us on an educational program.

However, the place that has not been available to us has historically been the Government on a wide range of things. It was the sole reason for that we worked on the development of section 507,

because we felt that there ought to be somebody at the State, when the regulation hits, that you can call and say, "What am I supposed to do?"

We have talked a lot this morning about the value of trade associations. We represent about half of our industry in our trade association, but nationwide the average of participation in trade associations is about 10 percent of the business community. So if you succeeded with 100 percent of trade association members, you would get 10 percent of the business community. That alone is not enough. We need a different level of outreach.

Senator LIEBERMAN. My time is up. I want you to think about submitting to us what some of the most important steps are that we can take to try to bridge the gap that we've just talked about.

Senator LIEBERMAN. Senator Chafee?

Senator CHAFEE. Thank you, Mr. Chairman.

Mr. Cooper, nice to see you again, and the others.

I think it was Mr. Carvalho or perhaps Mr. Backus who said that there's a whole series of regulators who come in, and what you look for is one-stop shopping or one-stop regulation. You testified to that.

That has a nice ring to it, and I think you cited somebody who did that. But on the other hand with relatively small companies, say, 25 employees, and all these people swooped in together—like Mr. Carvalho talked about in his amusing presentation here, amusing yet perhaps with a tinge of bitterness, and I say that in a gentle way—with all these forms you have to fill in, you have an emissions statement and the taxes and so forth.

I have two questions. Can there be such a thing as one-stop shopping? Can any regulator know air, water, RCRA, all those things?

And second, if he does come, or they come, wouldn't it drive you to distraction, having a big group in there checking everything in sight? You wouldn't get any work done that week, would you, Mr. Carvalho?

Mr. CARVALHO. No. I believe that one of the things the States of Connecticut is doing is some cross-training. When I have someone come in to an air inspection, they will question the hazardous waste; not do a detailed inspection, but just question whether it's in that pre-inspection questionnaire.

They are looking at water and drains and that type of thing. I think at that point they can either make recommendations or make a referral.

Senator CHAFEE. Mr. Backus, you talked about the man who looked at the drum where you were doing the plating—

Mr. BACKUS. That wasn't my shop, sir.

Senator CHAFEE. Oh, that was somebody else.

Mr. BACKUS. Somebody I know.

Senator CHAFEE. OK. You were using it just to illustrate this point.

What do you say to this one-stop shopping business?

Mr. BACKUS. Cross-training is needed everywhere. In other words, when I call the regulator and try to explain my problem, he needs training to understand my problem. I need training to understand the environmentalist's problem. Everybody has to be cross-trained.

What we need to do is have some kind of oversight or resolution committee that is composed of everybody, the black hats and the white hats together, so that we can all sit down and come up with solutions and not penalties.

Mr. ROY. Senator, I actually have something on that point.

I used to work for the Commonwealth of Massachusetts, Department of Environmental Protection. At DEP we had a project of which I was the project manager called the Blackstone Project.

Senator CHAFEE. Oh, I read about that.

Mr. ROY. Right. It's in my written testimony.

Senator CHAFEE. It's in your statement, yes. That was very successful.

Mr. ROY. Indeed. And in the Blackstone Project, as you read, we took a team of inspectors—air, water, waste, right-to-know—and a team of technical assistance providers. They were a team; they worked for two different agencies, but they were a team. We focused them on the same group of metal-intensive firms in Worcester, Massachusetts. It was rarely the case where you had four inspectors visiting the plant. Through the cross-training the air inspector, for example, would go into a plant; if she observed problems with hazardous waste, she might either have the ability to deal with them herself, or she could call her colleague back in the hazardous waste office. At the same time, they would work with the technical assistance people, who were independently going out and working with the Chamber of Commerce, having monthly meetings, sort of replicating what some of the trade associations do. In a lot of case the inspectors were directly referring companies to the technical assistance program.

Senator CHAFEE. I must say, Mr. Cooper, that this whole panel has been a great plug for joining associations.

Mr. COOPER. Well, I certainly would echo any support for that I could. I wish I got a percentage off of it.

[Laughter.]

Mr. COOPER. Bill and I don't get to work that way.

Senator CHAFEE. I must say, I was interested in your comment about how few businesses apparently belong to associations, but I presume you have seminars and publish suggestions in your newsletters, and so forth on how to deal with these problems.

Mr. COOPER. We do, and I'm sure Bill Sonntag would agree with me, the most difficult thing for us is to educate our members so that they can respond at the very basic level to Government regulations. We work very hard on raising their level of awareness.

I would point out that there are a number of States doing a real fine job with this cross-media activity. The States of Alabama, Iowa, North Carolina, Florida, and a number of others have—in some cases I know of, in Florida and Alabama and Iowa and North Carolina—they have experimented with using retired engineers to go out and visit companies. The State of Alabama had a foundation set up where these engineers would go out and visit companies and discuss cross-media issues with them.

So there are a number of things that are out there. Ironically, section 507 has a provision where you can do all of these programs through it. Having been involved in putting this together, I know

that it's all in there. You can do everything we've talked about through section 507 of the Clean Air Act. It is not limited to air.

Senator CHAFEE. OK.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Thank you, Senator Chafee.

Mr. CARVALHO. Senator Chafee, one thing. That wasn't bitterness relative to those—

Senator CHAFEE. I shouldn't use the word "bitterness."

Mr. CARVALHO. No, maybe on the Bureau of Census, OK.

[Laughter.]

Mr. CARVALHO. But the environmental things are ingrained into our process. They are a part of our product. They are actually what the consumer pays for. It's a part of the way we do business.

Senator CHAFEE. Good. Thank you.

Senator LIEBERMAN. Thanks, Tom.

Senator KEMPTHORNE?

Senator KEMPTHORNE. Mr. Chairman, thank you very much.

Mr. Cooper, I think you mentioned incentives, that there need to be more incentives, and that perhaps we need to find them. I would be interested in your comments, and those of all panel members, as to what incentives you would like to see us incorporate in this program, and how we could do that.

Mr. COOPER. From my experience, no incentive works better for a State—using the air area as an example—than the endorsement and approval by EPA of its State Implementation Plan. That was why, when we worked on developing section 507, it was very important to us that be a provision of approval of the State Implementation Plan.

However, the other aspect of the State Implementation Plan is that the State has to reach certain air quality goals in order to have its overall program approved.

It is our belief—and unfortunately, it's not as tangible and measurable as we would like it to be—that if you have a good education program, if people do understand their compliance requirements and they are participating in it, that there are reductions in air emissions just through that education process, because quite frankly we don't know what the small business community is doing now anyway. There's no baseline. We're guessing at the baseline, so we might as well guess at the success rate.

Give the States some actual air emission reduction credits for having appropriate programs, for active and aggressive programs. If we do that, then States may be able to credit some of this success, as evidenced by the success of the program.

I'm not sure what other carrot is there that would be as effective as passing blessing onto the program in such tangible ways. Money is always a good incentive, but it tends to run out.

Senator KEMPTHORNE. Sure.

Any other panel member with regard to incentives?

Mr. Backus?

Mr. BACKUS. As a businessman it is easy to say, "Give me a tax break," but I know better, that you need money to run a Government, and without money it is a poor Government.

I think the thing that is most necessary is a very simple thing, which is recognition: "These people are doing a good job," or even

more, "These people helped these people do a good job." As I say, I would like to feel we could break down the titles, the "black hats and white hats," and make everybody understand we're all in this together.

Senator KEMPTHORNE. Thank you.

Mr. SONNTAG. Senator, if I could expand on that as well, in an individual operation or facility, providing some kind of incentive through a compliance modification in some way, providing a soft landing or flexibility in compliance, providing technical assistance to them in a very concentrated way, I think can be an incentive for industries to reach out to find new technologies, to perhaps move beyond the actual compliance limits; if they could use innovative technologies to reach those limits or to go beyond them, we would think that would be a very great incentive for them.

It takes flexibility, however, in the way that environmental statutes are implemented, both water, air, and others.

Senator KEMPTHORNE. Dr. Roy?

Mr. ROY. Yes, just a couple come into mind.

In Massachusetts one of the things we were working on was the idea of raising—these States always see a lot of permit applications come in, and sometimes there is a tremendous backlog before the State permit writer can get to the application. One of the things we were talking about was putting that permit application at the top of the pile so that it gets faster review.

Another one, apparently in New Jersey they have gotten involved in some of this cross-media permitting stuff. In the memorandum of understanding that they drafted with the company that is participating, one of the conditions of the company's participation was that the company could sit down and talk to the Commissioner of the New Jersey DEPE on a regular basis. So just the opportunity to vent at the highest level was a strong incentive.

Senator KEMPTHORNE. Thank you.

Mr. Carvalho?

Mr. CARVALHO. I have to get back to what Scott said. I have been fortunate enough to sit in on some roundtable discussions relative to Superfund, relative to other items, in addition to the one that I visited for you, Senator, that included a broad range of people—lenders, insurance people, neighbors of sites, town officials. It's really incredible, the commonality that exists, if you could walk into that meeting. I think they have to be involved. This might not apply here, but it seems to me that when the EPA or some regulatory agency gets a mandate, that mandate before it is even given should consider the consumer, the voter, so that they know what it's going to cost them once it comes down the line, then educated to know that they should pay the extra price for the environment.

Somewhere, I think that's being lost.

Senator KEMPTHORNE. Should we have unfunded Federal mandates?

Mr. CARVALHO. I can't answer that.

Senator KEMPTHORNE. Thank you very much.

Senator LIEBERMAN. Thank you, Senator Kempthorne.

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR
FROM THE STATE OF WYOMING

Senator SIMPSON. Let me just say, and Senator Kempthorne too, that I think we're going to enjoy this subcommittee. It is a great privilege to be the ranking member of this subcommittee while Senator Joe Lieberman is the chairman. I have been on this subcommittee and the full committee since I came to the Senate. There are not many who can say that, or who want to.

[Laughter.]

Senator SIMPSON. I stay on out of pure perversity.

[Laughter.]

Senator SIMPSON. Nothing else guides my interest here but pure, driving perversity. I have served on this subcommittee under Gary Hart as chairman; 80 percent of his recommendations to the U.S. Senate and to the Nation on the Clean Air Act Commission in 1980 were adopted in 1990, 10 years later. That's how long it takes to do something in this bizarre arena, which we love or we would not be here.

So then I chaired the subcommittee, then Senator Breaux and Senator Graham, and now you, and I commend you. You bring special gifts to the committee. I know you; you are a special friend. You have an ability to listen to others, to get things done, and to be exceedingly fair in the process, to deal with others fairly and gracefully, if you will, civilly. I will enjoy working with you and the other members of the subcommittee.

It's just as hard to believe that it was two years ago when we finished the Clean Air Act Amendments of 1990. I remember the 5:30 a.m. conference committee that closed that morning, and there were just three survivors left in the Senate: Max Baucus, John Chafee, and myself at that hour, because the Speaker said, "I want this bill on the floor of the House with the conference committee by 10:00 a.m."

It had a lot of things in it that we cherished and a lot of things in it that were questionable, but when you've sat on a bill for 10 years you really ought to pass it, which we did. It has more hair on it than I have.

But I think this is an important part of it, the small business issue. The progress of establishing the program that we set up, the reasons why we did it are clear, to assist the small businesses, the small companies, to understand all of the extraordinary things that were required of them. That's why I think this oversight is very helpful.

I am eager to hear about the Texas and California programs, which I have been told are considered to be quite exemplary. I hope they will share their successes with other States as we get this up and running and provide assistance to those who can really use the help.

I ask unanimous consent that my opening statement be presented in the record.

Senator LIEBERMAN. Without objection.

Senator SIMPSON. We will greatly look forward to participating here as we deal with clean air, nuclear regulation, and these seri-

ous issues with new members of the subcommittee, who I am very pleased to see here and to serve here with.

So with that, Mr. Chairman, we have much to do, and I think this is a good start. I commend you and sincerely look forward to working with you.

[Senator Simpson's statement follows:]

OPENING STATEMENT OF HONORABLE ALAN K. SIMPSON, U.S. SENATOR
FROM THE STATE OF WYOMING

I would like to congratulate the new Chairman of the Clean Air and Nuclear Regulation Subcommittee. As you may know, I have served on the subcommittee with nuclear jurisdiction for 14 years now. I look forward to working with you, Senator Lieberman, in the 103rd Congress on issues related to Nuclear Regulation and Clean Air.

It hardly seems possible that two years have already gone by since the passage of the Clean Air Act Amendments of 1990! And now we are concerned with the implementation and status of that act and its specific provisions.

Today, I welcome the opportunity to investigate the status of section 507 of the Clean Air Act and its possible application to other statutes. Of immediate importance, is the progress of establishing the Small Business Program by the various States.

When we were debating the Clean Air Act, we recognized that Small Businesses frequently lack the technical expertise and financial resources necessary to evaluate State and Federal regulations and to determine the appropriate mechanisms for compliance. Section 507 establishes programs, at the state level, to assist small companies—under 100 employees—to understand the environmental regulations they are subject to and to provide help complying with those regulations. In most cases, this will be the first time a small business has been required to comply!

I am eager to hear of the Texas and California program, which, as I have been told, are considered to be among the best. I hope we will be able to share their successes with other States as this program gets up and running providing assistance to small businesses who can really use the help.

I thank you Senator Lieberman for holding this hearing today, and I look forward to a lively schedule of hearings in this subcommittee.

Senator LIEBERMAN. Thank you, Senator Simpson. Thank you very much for your kind words, particularly in front of two of my constituents who are here today.

Let me say that I consider myself very fortunate to be able to work with you on this committee and to have you as ranking member, based on your experience and your knowledge in the field and just the general way you go at this business of being a Senator. I suppose—perhaps I'm twisting your words—but it's a pleasure to be involved in this perverse enterprise with you. I think we will try our best to help the public.

I have one or two more questions that I want to ask the witnesses.

Mr. Watson from the Texas Air Board on the first panel said that the three concerns that he heard most from small businesses in Texas about the Clean Air Act were, one, how to get information about how to comply, which we've talked about some; but then two and three were essentially credit availability, how can you get capital, and the third was the confidentiality question, which is "How I can come forward to get your help to comply with this law without thereby showing you that I haven't been complying with this or some other regulation or law, and therefore putting myself in trouble?"

Are those an accurate reading of what you are all hearing from the small business community? Or is there something more?

Tom Carvalho, do you want to start?

Mr. CARVALHO. I think you hear that from the very small business that hasn't been able to keep on top of the regulations. They want to comply but they don't know how, and they are afraid to go out. There isn't a formal program, like in Connecticut where you have Conosha for safety, that acts as a consultant. You have contact with the Connecticut Technical Assistance Program, which is very good, but I also understand they are running out of funding. But I think that's important.

Someone had mentioned the associations. I sit on the steering committee of the Connecticut Business and Industry Association's Environmental Policy Council, and I chair one of their task forces. The hardest thing for a small business is getting them there. The humorous thing that I read is that there's just no time.

Senator LIEBERMAN. They're too busy running a business?

Mr. CARVALHO. They're trying to keep on top of this thing to get ahead of the curve to find out what's going on, and that's a problem. Outreach has always been a problem.

Senator LIEBERMAN. Yes.

Is credit availability a problem, as Mr. Watson indicated? Mr. Backus?

Mr. BACKUS. In Connecticut, the banking industry at this time, at best, is suspect.

Senator LIEBERMAN. Let me explain to Senator Simpson what you mean by that.

[Laughter.]

Senator LIEBERMAN. This means that a lot of small businesses are having trouble getting loans from banks, suspect in that sense.

Mr. CARVALHO. Yes. And you also have to understand that my position as a metal finisher carries a certain stigma about its property. In fact, it wasn't but 18 months ago that one of my neighbors came to see me and told me they were selling their business and their property. I said, "Thank you very much. How can I help you?" They said, "Well, we think you should buy it." I said, "Well, I'm not expanding at the moment, but I appreciate the right of first refusal." "No, you don't understand. We think you should buy it." "I have no reason to buy it." "Yes, you do, or you might, for environmental reasons."

It kind of set me back and made me think that there's a whole stigma to it, that being dirty, you shouldn't be allowed to clean; being dirty, you shouldn't be given any money, because you may not be around tomorrow.

Senator LIEBERMAN. What did you think of Mr. Watson's idea that SBA should start a special program of guaranteeing bank loans for environmental compliance?

Mr. CARVALHO. It's a good idea, but I also have to say that you have to bring a little more into it. You have to understand that when we talk about technical and financial assistance, there is often the problem that the money that is offered isn't enough to cover the study of the problem. So it's how the money is spent. It's not enough for an agency to come to me with \$10,000 to study chrome air emissions. A test of one chrome stack is \$3,000, and if I test at the beginning of my problem and at the end of my problem, that's 60 percent right there.

What would be smart would be if I went out to these six or seven other chrome platers in Connecticut, the only ones that are left, and we put together a consortium to study the chrome-plating process as it applies to all of us. It would be money spread out among five or six businesses. So it's how the money is spent that is a very important thing, also.

Senator LIEBERMAN. Mr. Cooper, did you want to answer that?

Mr. COOPER. Yes, Mr. Chairman. The one area that I was surprised that Mr. Watson didn't mention, although from his perspective I understand it, is liability. The thing that we hear most from our members is liability and fear of liability.

For very understandable reasons, Congress has included joint strict liability in many of the environmental laws. What that means is that your liability is never-ending. Companies are scared to death that what they may do today may not be suitable 10 years from now. For example, we have companies now at Superfund sites that disposed of waste in 1982 at the direction of a local community or a local municipal government. They say, "Put it here, and put it here in this way," and now they are paying for the cleanup of that site. They didn't anticipate that at the time, so they are concerned that what they do now may be illegal 10 years from now.

They basically want to know, what is it I'm supposed to know? And if I do what you tell me to do, is it going to stick for a while? Or am I going to have to do it again? And how liable am I going to be for this process down the road?

I think the hostility that we see toward Government when the inspector comes in, that's what our printer members are seeing. They're seeing that this person represents that vast unknown liability that I'm facing.

Senator LIEBERMAN. Sure. That's understandable.

Mr. BACKUS. If I may, Mr. Chairman?

Senator LIEBERMAN. Yes?

Mr. BACKUS. Mr. Cooper, that's known as the "oops factor" of the moving target.

Senator LIEBERMAN. Let me ask a final question and ask each of you to take a quick shot at it. In some sense it builds off of that powerful number that you stated earlier, Mr. Cooper, that we tend to think of trade associations playing an active role—which they do—in educating members, helping members comply, giving information; but as you said, only 10 percent of businesses in the country belong to trade associations. So you have the other 90 percent out there. We want to create this ethic of cooperation between Government and business, a pollution prevention stress over the next decade, hopefully, as opposed to command and control. And it does say to me that this new role that we've carved out for Government in section 507 of the Clean Air Act, in offering assistance and compliance aid to small businesses, is really critical to try to reach that other 90 percent, working, of course, with the Small Business Ombudsman's Office in EPA.

This is a summary question. I want to ask each of you the same question I asked the earlier panel. As we evaluate progress under section 507 and these Small Business Assistance Programs at the State level, and as we think about extending this concept to other environmental laws, such as the Clean Water Act and other major

reauthorizations such as RCRA and Superfund that we're going to get into in this two-year session of Congress, what are the standards that we should be applying for whether they work or not? What's the test that we should hold them to?

Mr. Cooper, do you want to start?

Mr. COOPER. I guess the one thing I would be looking at is expansion of future laws. There is certainly one test that I would put in there: are you asking a small business for information that you don't really need? And is that information available in some other way?

That's an overwhelming problem for a small company, to have to provide information, and quite frankly it is information that they don't know how to provide you anyway.

I'll go back to something I said earlier. We've been working with some members on the House Energy and Commerce Committee toward a consolidated permitting and reporting program. I believe, and I have not yet found a reason to question my beliefs, that the typical small business should be able to provide the Government—State, Federal, and local—with a single annual environmental report. Mr. Chafee had asked how that dry cleaner knows. The dry cleaner would know the same way every other business knows, basically, and that's through a mass balance calculation; what do you buy, and what's left over after you're finished with your work? That tells you that you've got some sort of pollution problem, whether it's air, water, waste, or whatever. It tells you what's not accounted for.

That's really all in the world you need. If Congress will simply not ask for any more reports than they need and reduce some of the ones they have, that would be one standard by which the effectiveness of legislation could be measured.

Senator LIEBERMAN. Thanks.

Mr. Backus?

Mr. BACKUS. I'm almost at a loss for words to answer that because I can't conceive of how you can judge it, sir. The factors are both economic and environmental. There has to be some measure of the environment. It's not as simple as just stepping out the front door and taking a great big whiff; that doesn't do it.

I wish I could help.

Senator LIEBERMAN. I invite you to think about it, and particularly as you continue to go through this process of compliance with the Clean Air Act, and as we see how the Small Business Assistance Office in Connecticut is set up under 507.

Mr. Sonntag, did you want to say something?

Mr. SONNTAG. Mr. Chairman, I think it is somewhat rhetorical, but I would agree with Scott that the level of environmental protection is the first measure that one wants to look at. The second measure, I think, is a look at the costs of reaching compliance for the individual firms. If you can reduce that through the information provided, through the technical assistance, the compliance assistance provided through the programs, then I think you are going to be able to quantify that to some degree and reach some goals.

On a simple basis, I think the number of firms that are in fact contacted by the programs, either through trade associations or independently through an Ombudsman's Office, would be a very good

number. There was a point made about the Blackstone Project earlier. That's a good model, but that's also a model that shows how resource-intensive this kind of process really can become; because, as Dr. Roy mentioned, those were teams of people who were schooled in multiple disciplines in the environment who went out and actually worked individual firms, identified opportunities in those companies. That's resource-intensive.

If the Congress is going to expand on 507, and I think they should—it's a very good start—there has to be some way that resources can be provided, either through the States, the Federal Government, the trade associations, nonprofit organizations that are springing up to do this kind of thing. There's a lot of those kind of organic organizations springing up. Those should be brought to bear on this.

Senator LIEBERMAN. Thanks.

Dr. Roy?

Mr. ROY. I'm glad I'm right after you, Roy, so I can address the Blackstone Project.

The Blackstone Project was both a regulatory and a technical assistance project, so a lot of that resource intensiveness was due to the involvement of inspectors and the goal of the project, to enforce compliance.

By the way, it was cost-effective in doing that compared to the status quo method of inspecting for compliance.

But I think Bill was generally right in the question of not expecting Government people to be going out to every plant out there, and especially every single small business.

More to your point, in the coming months as you try to figure out what's working and how to draw out the lessons, I would look at the existing technical assistance programs—not just the 507 programs, but ConTAP was mentioned; there's a strong program at the Rhode Island DEM. There are something like 40 State pollution prevention technical assistance programs across the country, and I would talk to them and see what's working for them, as well as the 507 programs.

As has already been mentioned, I would try to focus attention on actual reductions of pollution, actual compliance, and to the extent possible, the actual cost to the businesses. I get a little worried about some of the bean-counting that goes on in evaluations, the number of phone calls, the number of brochures sent out, the number of conferences. I'm not sure that those really measure true performance. I feel that it would be useful to develop a tradition of truly measuring performance.

Finally, I would say that it would be important to look at the context of these assistance programs. The regulations alone are driving some of the businesses to do things, separate from the technical assistance. The trade associations, as you say, are hitting some of them as well, and if you can correct for those factors, I think you will be well served.

Senator LIEBERMAN. Thank you.

Mr. Carvalho, what can you—

Mr. CARVALHO. I'm going to send you to Region 1. There was a study done on a fellowship that I was contacted on, and rather than answering questions on the phone I met with this nice young

lady from Tufts and discussed it with her. They did a study on reductions in Connecticut, I believe compared to Massachusetts or Rhode Island or both, and that may give you some indications of what they came up with on how to measure this. I happen to have a copy with me; and I'll leave it for you.

Senator LIEBERMAN. Great. That's helpful.

Mr. CARVALHO. I want to thank you. I want to say that this outreach, this grassroots thing where we come down here or you come to Connecticut or to different States, is excellent. I can see whether you can forget whether it's raining or snowing outside in this place.

[Laughter.]

Senator LIEBERMAN. You can. There's not only the danger of being inside the Beltway, there's the danger of being too much inside the Capitol. That's why we want to reach out in that way.

We thank you very much for coming in. Your testimony has been very helpful.

The fact that we set up the section 507 program was not only new, but it was also an acknowledgement that things had not been going as we wanted them to go, that the cries and calls for help from small businesses that we hear when we go home had a cumulative effect, which is that we're passing these laws with good intentions—as Tom Carvalho said, we're all environmentalists, or we all should be—and yet the cumulative effect of them in the way they are carried out on small businesses can be devastating. The attempt here is to try to turn it all around and have it operate in a spirit of partnership and also in a sense that if we do it right, not only will we clean up the environment but we will make it easier to do business in the best sense.

I appreciate the reaction. I appreciate your kind words, Mr. Backus. I want to note for the record that your son is with you. His name is Kirby. We hope that he also leaves here with some sense of optimism about his Government. Obviously, it is for kids like that and others that we are laboring here, to make sure not only that they have a clean environment, but that they have a healthy economy that they can grow up in.

We are going to keep the record of this hearing open for two more weeks. If you have any comments that you want to offer for the record, you may send them to us.

I am also going to take the liberty to ask the staff to put together some of the comments which were in the nature of friendly criticisms that were made along the way, which I will forward to the folks at EPA for their response.

This is, to put it mildly, not the end—what was that Churchill quote? It's not the beginning of the end; it's the end of the beginning, barely, so we are just at the beginning. We have a lot more work to do and we look forward to your help in doing that.

Thanks very much. The hearing is adjourned.

[Whereupon, at 11:34 a.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and responses to additional questions follow:]

STATEMENT OF JOHN S. SEITZ

Mr. Chairman and members of the subcommittee, I am pleased to have this opportunity to discuss with you the Environmental Protection Agency's (EPA's) programs to implement section 507 of the Clean Air Act Amendments of 1990 and to provide technical assistance to small businesses on air pollution issues. Accompanying me today is Karen Brown, EPA's Small Business Ombudsman from the Office of Small and Disadvantaged Business Utilization.

As President Clinton has stated, small businesses are a critical component to the economic growth of this nation. As you know, the Clean Air Act Amendments of 1990 contain an unprecedented regulatory agenda, affecting virtually every major industry group in the country, including many small businesses. My office alone, by the end of 1993, is responsible for issuing over 70 rules, guidance documents, and other major final regulatory actions affecting a wide variety of industries, including steel coke ovens, chemical manufacturers, dry cleaners, service stations and auto-body refinishers and many others. The good news is that all of this regulatory activity will result in extensive environmental benefits. When fully implemented the Clean Air Act Amendments will remove 56 billion pounds of pollution a year from the air.

However, implementation of the provisions of the 1990 Amendments will for the first time require regulation of certain small businesses in order to meet the various provisions related to urban air quality, toxic air pollutants, and other issues. As you know, small businesses frequently lack the technical expertise and financial resources needed to evaluate State and Federal regulations and to determine the appropriate means of complying with standards.

Mr. Chairman, you and the other members of this Subcommittee and others in Congress recognized the special problems that many small businesses could have in dealing with the Amendments' complex requirements. In adding section 507 to the Clean Air Act, Congress required each State to establish a program to assist small business in complying with the requirements of the Act. Congress also required EPA to develop guidelines to help States establish their small business assistance programs, and to provide technical assistance to these State programs. After the Act was signed into law, my office and the Small Business Ombudsman began working with States and small business organizations to develop these section 507 State guidelines for State small business assistance programs. We issued those guidelines in January 1992.

Section 507 required each State to submit for EPA approval State plans for establishing its small business assistance program by November 15, 1992. Those programs are required to be fully operational by November 1994. Each State's program must include three components: (1) the designation of a State office to serve as a small business Ombudsman; (2) the establishment of a small business assistance program; and (3) the appointment of a seven-member compliance advisory panel.

As of today, 38 States and territories have submitted their programs to EPA for review and approval. The remaining States are all moving ahead to establish their assistance programs, though they have not yet formally submitted them to EPA. We are working with these remaining States to ensure that they submit their programs as quickly as possible. We expect that most of the remaining States will submit their programs to us in the next few months and that all of them will be in over the next 12 months. Our regional offices are continuing to work with these States. For example, the Region IV Office in Atlanta is holding a conference so that, among other things, the States that have met their submission requirements can help those States that have not yet done so.

My Office has long maintained a series of technical service centers and hotlines to provide technical assistance and information to State and local air pollution control agencies. In 1991 we expanded these services to supply assistance and information related to small business activities. These centers and hotlines are being used by State agencies that have been developing their small business assistance programs, as well as by small businesses themselves, to request information concerning the Clean Air Act requirements, control technology data, pollution prevention methods and alternatives, emission measurement methods, air pollution monitoring devices, and prevention of accidental releases of toxic chemicals into the environment.

In conjunction with EPA's Small Business Ombudsman, we also have developed and widely distributed a document entitled "The Clean Air Act Amendments of 1990: A Guide for Small Businesses." This is a plain English guide that highlights the ways a small business might be affected by the complex requirements of the Act and gives them phone numbers and addresses of places to contact for help in dealing with the Act. Our initial printing of the document was for 10,000 copies; we also

distributed several easy-to-reproduce "camera ready" copies for small business trade associations and EPA Regional offices.

We also operate a computer bulletin board that provides information on the status of our implementation of the Clean Air Act. This service allows large and small business trade associations, environmental groups, state officials or anyone else in the world with a computer to find and, if they desire, to download a wide array of information including the text of recently signed rules, policy and guidance documents, our Clean Air Act Implementation Strategy and Schedule and the text and summaries of the Act itself. We also operate electronic computer bulletin boards that provide information on control technologies, emission measurement methods, and pollution prevention issues. We average about 50,000 calls a year to these electronic bulletin boards. By the end of the year we will have established a separate electronic bulletin board dedicated exclusively to small business issues.

EPA's Office of Chemical Emergency Preparedness and Prevention, which is responsible for implementing the accidental release prevention provisions under the air toxics portion of the Act, also has a variety of outreach initiatives underway. For example, they operate one of the hotlines I mentioned a moment ago. They also worked with business groups and others to develop and widely distribute a booklet entitled "Managing Chemicals Safely: Putting It All Together," designed to help both small and large businesses understand the importance of safe chemical management.

Among the many other projects we have underway is the development of a guidance document to help States and EPA staff prepare materials that clearly explain complex regulatory actions for small business audiences. We are also planning to develop specific small business-oriented materials to help explain the impact of some of our regulatory actions on small businesses.

Perhaps most importantly, we have taken special care to examine and, where possible mitigate, the impact of our regulations on small businesses. For example, last July we issued a final rule on State operating permit programs. In that rule we provided a five-year deferral for so-called "non-major sources;" our best information tells us that there are about 350,000 non-major sources in the country and a great many of them are small businesses. The rule also encourages States to use "general permits" when dealing with non-major sources, many of which are small businesses. This allows the State or local permitting authority to issue a single permit applicable to numerous similar small sources (such as dry cleaners) located in a given area. Individual sources could then notify the State that they are subject to the general permit provisions, rather than having to file full permit applications. This will greatly cut down on the paperwork required by an affected small business.

Mr. Chairman, I would also like to note that the Clean Air Act has also provided business opportunities to many small businesses. We are seeing trends showing that small businesses are becoming actively involved in developing new technologies and ventures as a result of markets created by the Clean Air Act. In 1991 EPA commissioned an independent assessment, undertaken by Smith Barney and ICF Resources, of the degree to which new business activities are being stimulated by the Clean Air Act Amendments of 1990. Issued last August, the report projects air pollution control industry revenues to grow by \$4 to \$9 billion annually through the year 2000. The report also highlighted several examples of small businesses that are carving a niche for themselves in markets created by the 1990 Amendments.

ROLE OF THE SMALL BUSINESS OMBUDSMAN

Mr. Chairman, I would like to take a moment to discuss the role of the EPA Small Business Ombudsman. In 1982 EPA established a Small Business Ombudsman program to provide an outreach service, including a "toll free" telephone hotline for the Agency's small business constituency. While this was initially established in response to hazardous waste-related issues it has been expanded to cover all media programs, including air pollution. Hotline usage has grown from three to four thousand calls per year in the early 1980's to more than 20,000 per year by 1991. Her office also mails a Small Business Office Technical Information newsletter to nearly 10,000 requesters. The Ombudsman monitors and provides input into all major EPA regulations having a potential impact on small businesses. The Ombudsman role is to speak internally to EPA program offices on behalf of the small business community. I can attest that they fulfill this role effectively.

Besides their role in the regulatory process, the Ombudsman's Office also informs national trade associations and businesses throughout the regulatory process and provides information and assistance in an attempt to enhance voluntary compliance.

Since the Clean Air Act Amendments of 1990 were enacted, the Small Business Ombudsman has worked closely with my Office to implement section 507. For exam-

ple, in the Spring of 1991, the Ombudsman sent letters to each Governor and over 400 National Trade Associations alerting them to key aspects of the requirements and requesting their support. Once We issued the guidelines in January 1992, the Ombudsman sent them to over 400 trade associations. The Ombudsman plans to review each of the State small business assistance programs that have been or will be submitted to EPA for review and approval.

In 1991 and 1992, the Ombudsman and her deputy travelled to ten States to assist them in the development of their own Ombudsman programs under section 507. They are now planning a national conference of State environmental small business ombudsmen this fall to help initiate the program and develop a communication network to help each other and share information.

Mr. Chairman, this concludes my prepared statement. Ms. Brown and I will be happy to answer any questions that you may have.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON,
DC 20460

Chairman Joseph Lieberman, Subcomm. on Clean Air and Nuclear Regulation,
Committee on Environment and Public Works, U.S. Senate, Washington, DC 20510

Dear Mr. Chairman:

Enclosed herein are the Agency responses to follow-up questions from your March 10, 1993 Subcommittee hearing on Section 507 of the Clean Air Act.

Please instruct your staff to contact me if any additional assistance is necessary.

SINCERELY,

Thomas Roberts, Director

Legislative Analysis Division

Follow-Up Questions for March 10, 1993 Hearing of the Subcommittee on Clean Air and Nuclear Regulation Regarding Section 507 of the Clean Air Act (Act) and Other Small Business Environmental Assistance Programs (SBAP)

QUESTION 1. What types of small businesses will have to meet requirements under the Act before 1994? Is the Environmental Protection Agency (EPA) prepared to assist States in advising these industries on pollution prevention compliance alternatives before they must obtain permits under the Act? What type of assistance will EPA provide to States as they seek to advise specific industries on compliance strategies? In what time frame?

ANSWER 1. Most new requirements under the Act will not directly affect small businesses until after the beginning of 1994. As part of the process for developing new rules, EPA does consider any available pollution prevention approaches. Information on pollution prevention and compliance strategies for specific industries that will be affected by Federal air emission standards will be available to the States through the Federal SBAP by providing access to EPA staff members developing these rules. The EPA is preparing materials written in layman's terms to explain the requirements of new Federal air emission standards to small businesses. These documents are expected to be available upon promulgation of each final rule. The EPA is also planning on developing materials to address pollution prevention alternatives for certain targeted industry groups.

QUESTION 2. The EPA's guidance encourages States to house their technical assistance programs—the heart of the section 507 program—within their air offices. Will this discourage multimedia and pollution prevention approaches? How will EPA judge whether State programs are providing adequate pollution prevention assistance?

ANSWER 2. The EPA views the primary goal of section 507 as providing assistance to small businesses in complying with the requirements of the Clean Air Act as amended. The personnel most familiar with these requirements are most likely to be those in the air office. Therefore, the EPA's guidance on section 507 suggests that the technical assistance program be located in the air office, or at least have adequate access to the air program staff. The EPA also encourages, however, that the section 507 technical assistance program be coordinated with any existing State pollution prevention and chemical emergency prevention programs. In fact, several States have already chosen to locate their section 507 technical assistance program within an existing pollution prevention outreach program.

The EPA is also working to foster coordination between its various programs. The Federal SBAP is a coordinated effort among the Office of Air Quality Planning and Standards (OAQPS), the Pollution Prevention information Clearinghouse (PPIC),

and the Chemical Emergency Preparedness and Prevention Office (CEPPO). Each office will be preparing information on their program issues for use by the State SBAP's. Also, the EPA routinely examines pollution prevention options and multimedia impacts when developing new regulations, and makes that information available to the public. This information will be available to the State SBAP's through the Federal SBAP.

The EPA Small Business Ombudsman's Office will be evaluating the effectiveness of the State SBAP's. Performance-based criteria to assist in these evaluations are being developed. This process is discussed further in the answer to question number seven.

QUESTION 3. At the hearing, State and small business representatives testified that small businesses find it difficult to obtain capital for environmental improvements (Texas and California both have small business loan initiatives). Mr. Watson, the Chairman of the Texas Air Control Board, noted that he intended to urge EPA to sign a Memorandum of Understanding (MOU) with the Small Business Administration (SBA) establishing SBA loan guarantees to small businesses to fund their environmental improvements. Do you support Mr. Watson's proposal? Why or why not? Are there other steps EPA can take to improve access to capital?

ANSWER 3. Yes, the Agency supports Mr. Watson's proposal to establish an effective MOU with the SBA. The EPA Small Business Assistance Ombudsman's Office has been working on this with the 58A. The provisions of the MOU will serve all small businesses faced with environmental compliance costs. Our initial drafts placed considerable emphasis on both the EPA and the SBA's assistance to small businesses and to one another. The MOU describes in some detail the EPA/SBA small business cooperative assistance and counseling, and the SBA's accelerated and priority loan efforts to help assure compliance with the Act regulations. The Ombudsman has met with the SBA on several occasions to workout the approval of the MOU. Due to changes in the administration, EPA's proposed MOU was delayed.

QUESTION 4. EPA states in its section 507 guidance that states might want to prepare "information packets which describe in layman terms compliance and technical information relevant to a small business stationary source's obligation under the Act." To what extent does EPA plan to prepare or help States prepare such documents? How can EPA minimize duplication of effort among states in implementing this suggestion? Can EPA prepare this type of material for specific industries in advance of their facing permitting requirements?

ANSWER 4. The first activity undertaken by the EPA to assist the States in preparing materials for small businesses is the development of A Guidebook for Explaining Environmental Regulations to Small Businesses. This document discusses the development of materials that present technical and legal information in easy-to-understand layman's terms. Included in this guide are discussions of small business concerns, small business perceptions of government and regulation, communication "tools" and presentation options, as well as several examples of actual materials that have been prepared to help small businesses. The EPA will also provide assistance in the form of technical expertise (by staff familiar with the subject area), review of the draft materials, and assistance in distribution (through the small business electronic bulletin board).

A general guidebook prepared by EPA, entitled The Clean Air Act Amendments of 1990: A Guide for Small Businesses, has been available since late 1992. The EPA also published Managing Chemicals Safely: Putting It All Together in 1992. This document is intended to introduce smaller businesses to the practice of chemical safety management.

The EPA plans to prepare materials that explain the new hazardous air pollutant standards to small businesses. These documents will be developed along with the standards for each specific source category. The goal is to have these materials available upon promulgation of the final rule.

In an effort to minimize duplication of efforts, the EPA is setting up an information exchange network. The goal of this network will be to foster communication among the States themselves, as well as with EPA offices involved in small business related activities. This will encourage the sharing of completed materials, as well as the development of joint projects among different agencies. The heart of this network will be an electronic bulletin board system dedicated to small business related activities. This system will serve as a forum for States and EPA to exchange information concerning small business issues and projects. Plans are to hold an annual small business assistance conference sponsored by EPA. This meeting will be an opportunity for State small business assistance staff members to meet and discuss completed activities as well as plans and ideas for the future. It will also be an op-

portunity for direct interaction with EPA offices involved in small business activities.

QUESTION 5. The EPA testified that it expects to have a computerized technology transfer network—an “electronic bulletin board”—up and running by the end of 1993. Will the information on this network be easy for small business owners and operators to understand? Will it describe pollution prevention and compliance strategies for small businesses affected early on by the Act? How does the bulletin board relate to other pollution prevention and technology information sources, such as the PPIC, and the Office of Environmental Engineering and Technology Demonstration’s pollution prevention and technology guides (e.g., its industry-specific pollution prevention guides)?

ANSWER 5. The Federal SBAP is planning an electronic bulletin board dedicated to small business issues. This system would be located on the existing OAQPS Technology Transfer Network (TTN). The main focus of this system will be to facilitate communication among the State SBAP’s and any EPA Offices involved in small business related activities. Information on the system is expected to include State and EPA program contacts, ongoing and future State and Federal small business activities, as well as information on the availability of completed small business materials. Many of these materials may actually be available directly through the bulletin board simply by downloading from the system. This bulletin board will be easily accessible by anyone having a personal computer, modem, and communications software, for the price of a phone call. Small business owners themselves will also be able to access the system with a minimum of effort.

The four existing EPA technical service centers currently participating in the Federal SBAP are the Control Technology Center (CTC), the Emission Measurement Technical Information Center, the CEPPPO, and the PPIC. Each of these centers has a “hotline” and/or an electronic bulletin board that is easily accessible. The CTC electronic bulletin board (which is located on the OAQPS TTN), is currently being used to distribute information for the Federal SBAP, until the dedicated small business board becomes operational. Another system on the OAQPS TNN that may be helpful to State SBAP’s and small businesses is available on this board includes materials such as model permits and recently signed rules, as well as the text of several guides and reports, including “The Clean Air Act Amendments of 1990: A Guide for Small Businesses”.

Information on the activities and services of the four EPA technical service centers participating in the Federal SBAP will be available on the small business electronic bulletin board. The small business bulletin board system may also be used by any EPA Office or State agency to make information available to others concerning any materials prepared for small business or any activities related to small businesses. Most completed documents related to small business issues may be made available to the public simply by downloading from this system.

No “QUESTION 6” in follow-up letter sent

QUESTION 7. The EPA’s guidelines define the elements which states section 507 programs should have, but do not provide any performance-based standards for State programs. Small business representatives at the hearing expressed concerns that State programs are and will continue to be underfunded. Has EPA defined any performance-based criteria for evaluating State programs? How will EPA measure whether these programs are providing adequate pollution prevention and compliance assistance? Will EPA track the effect of these programs on compliance and pollution reduction? How will EPA judge whether States have committed adequate funds to program implementation?

ANSWER 7. The EPA Small Business Assistance Ombudsman’s Office is in the process of developing performance-based criteria for evaluating State programs. The Ombudsman’s Office, the Office of Air and Radiation, and the State Program Directors will collaborate in establishing these criteria. Obviously, such things as “effective outreach,” adequate professional staffing, proper structural location, the availability of appropriate technical information, and on-site assistance would be items on our criteria list. Other evaluation type criteria might include such activities as environmental audits, requests and responses, hotline usage, and publication availability. We will strongly encourage “networking” between States, trade associations, and the Agency to make stronger and more cost effective measures. We will have to help each other until fee collection levels will sustain fully developed State activities.

The EPA will judge whether States have committed adequate funding through program oversight reviews conducted by the EPA Small Business Assistance Ombudsman’s Office for Section 105 grant programs.

QUESTION 8. The EDF and representatives of State businesses testified to the need to streamline reporting and permitting requirements for small businesses. What activities, if any, does EPA have underway to reduce reporting burdens for small businesses? Does EPA believe reporting burdens for small businesses could be reduced without compromising the effectiveness of its environmental programs? What experience does EPA have with multimedia approaches to permitting? Does EPA have plans to pursue multimedia permitting strategies? If so, what are they?

ANSWER 8. In the rulemaking for the Operating Permits Program (57 FR 32259, July 21, 1992), EPA explained what it had done to minimize undue impact on small businesses. Except for acid rain sources, and municipal waste incinerators, EPA has allowed the States to temporarily defer the title V permitting obligation of all non-major sources which would have been otherwise subject to the permitting provisions. This deferral will continue until the Agency has completed a rulemaking to consider whether a Permanent exemption, continued deferral, or applicability of the permits program would be appropriate.

For those small businesses still required to obtain a permit, and for other appropriate source categories, EPA is promoting the use of general permits where possible. A general permit is a more streamlined version of a full permit that can cover a category or class of many similar sources. Public participation, EPA, and affected State review must be provided by the permitting authority at the time the general permit is developed, but not when the individual sources subsequently submit requests for coverage under the general permit. The permit issuance process for eligible sources can thus be greatly simplified, which substantially reduces the administrative burden on both sources and the permitting authority.

Within the Operating Permits Regulations, the previously mentioned general permit provisions should streamline the amount of reporting that is required for permit application thus simplifying the application process for small businesses. While reporting is simplified, it is not anticipated that the program will be compromised since all sources, including both large and small businesses, must submit compliance certifications indicating compliance with any applicable emission requirements.

The Small Business Ombudsman has proposed multimedia permitting and reporting on several occasions. We believe that at least a pilot program to determine its effectiveness would prove invaluable to the small business community and to the mission of the Agency in the implementation of its regulation.

QUESTION 9. To what extent is EPA supporting the work of the Department of Commerce Manufacturing Technology Center (MTC) program? What level of support does EPA expect to provide to the program for the next fiscal year?

ANSWER 9. The EPA has begun working with the MTC's to help them incorporate pollution prevention and design for the environment (DFE) approaches into their technical assistance efforts with business.

The MTC's are potentially a very powerful vehicle for providing technical assistance on pollution prevention/DFE. They have expertise on manufacturing processes that can help companies make fundamental process changes that support both pollution prevention and economic competitiveness. They provide a source of expertise that will help companies go beyond compliance with end of pipe regulatory requirements.

State pollution prevention technical assistance programs, particularly those funded under the Pollution Prevention Act, will be valuable sources of expertise for the MTC's. The EPA is exploring methods to enhance coordination among these agencies. The EPA is also exploring methods for supporting the MTC's with the expertise that EPA has in its research programs and its pollution prevention and the DFE programs.

The Agency will support these activities with the pollution prevention for States grants, and with research funds under the Pollution Prevention Act, and additional resources that will be available under the President's Technology Initiative.

STATEMENT OF KIRK WATSON, CHAIRMAN, TEXAS AIR CONTROL BOARD

Chairman Lieberman, members of the committee:

Good morning. My name is Kirk Watson. I have the privilege of serving as Chairman of the Texas Air Control Board, the Texas agency responsible for air quality regulation. I appreciate your invitation to speak to the Senate Subcommittee on Clean Air and Nuclear Regulation on the status of implementation of the Small Business Assistance Program in Texas.

Congress was very wise in recognizing the burden small businesses face in complying with the Federal Clean Air Act Amendments of 1990; and, Sen. Lieberman, I compliment you and the members of this committee for the leadership you have shown in setting forth in Sec. 507 the requirements for the establishment of the Small Business Stationary Source Technical and Environmental Compliance Assistance Program.

Our State Implementation Plan (SIP) for this program was forwarded to the Environmental Protection Agency on Nov. 15, 1992, with implementation deadline for the total program set for November of 1994.

Recognizing the challenge of first locating, and then notifying, educating, permitting, and bringing thousands of small businesses into the regulatory process, we made the decision to get the Small Business program on line as quickly as possible. Therefore, Texas began organizing the Small Business program almost a year ago, nine months before the SIP was actually due. In doing so I am proud to say Texas was among the first states in the Nation to institute such a program.

So far, Texas has established a Small Business Technical Assistance Program to begin notifying small businesses of the Act's requirements, and to provide informational and educational assistance. We also have created the office of a State Small Business Ombudsman. The Ombudsman acts as a sounding board for small business owners and operators . . . to cut the government red tape they face as they are forced to move toward compliance. A 1/800 hotline to the Office of the Ombudsman was set up in April 1992 to provide easy access to information.

I can tell you unequivocally that the Federal Clean Air Act Amendments of 1990 are having a tremendous impact on small businesses; those with 100 employees or less. The sheer numbers are overwhelming.

Our research indicates that almost 60,000 small businesses in Texas, representing as many as 500,000 jobs are being impacted by these regulations in our state alone.

The new regulations will have a statewide effect on the small businesses emitting toxics regulated under Title III of the Act, such as drycleaners, auto body paint shops, printers and woodworking shops, in addition to small businesses which are located in the state's nonattainment areas. . Houston/Galveston, Beaumont/Port Arthur, Dallas/Fort Worth and El Paso such as gasoline stations.

We are currently working with the office of the Texas Governor, Lt. Governor, and Speaker of the House to create the Compliance Advisory Panel that will report both to the Governor and to the Environmental Protection Agency.

These are the basic structural components mandated by Sec. 507 of the Act.

To begin the implementation process we have initiated some of the following activities:

Identification

To notify, you first have to identify. To this end, we began working with Region 6 of EPA, Chambers of Commerce, Councils of Governments, trade associations, the Texas Employment Commission, the Texas Department of Commerce, and other agencies, to ascertain the names and locations of businesses potentially falling under these regulations.

Notification

Working with the Office of the Texas Employment Commission, Department of Commerce and other agencies, we are developing a data base of specific businesses so that direct mail can be used to, first, make these businesses aware of the law and its requirements, and, second, to provide information on workshops and seminars available to them and their employees. Because direct mail is labor intensive and costly, we have started working with industry and business associations to help us identify specific groups.

In addition, the Texas Air Control Board is using its public information resources to provide background to all media—general, environmental, agricultural, business, and trades.

Education

Last spring, TACB, with the cooperation of elected officials and educational institutions around the state, began offering generalized workshops to explain the new law . . . and we quickly learned that "generalized" is not the way to go. Each business owner wanted information that applied to his or her particular industry. Now, we have moved to presenting seminars that are industry-specific and are presented in communities across the state, not just one in Houston or one in Dallas.

Gaining this knowledge . . . that each industry must be dealt with individually . . . has led to several conclusions:

1. We recognize the need for industry-specific educational programs in numerous locations;
2. We should develop industry-specific packets of information on the regulations and the processes that can lead to compliance;
3. We need the capability for transfer of information electronically (such as the agency's Electronic Bulletin Board now under development) that can be accessed by modem statewide, and that will contain the rules, regulations, policies, forms to be used, permitting processes, compliance and emission inventory information, lists of contacts, etc.;
4. There should be development of owner/operator manuals covering industry-specific regulations that provide multimedia information for industries that are regulated not only for air, but for water, wastewater, solid waste, hazardous materials, etc. This will include an updating and notification process whereby changes in rules, regulations and policies can be added to the manual on a continuing basis by downloading updates from the Electronic Bulletin Board or to be mailed on request.
5. In cooperation with the Texas Department of Commerce, Small Business Development Centers, and local educational and trade association we are developing resource linkages providing the sources of information to both established businesses and to those who are contemplating relocation to Texas;
6. And, with the cooperation of trade associations, we foresee the development of training videos, work books, permitting check lists, and how-to tutorials that can be distributed to the associations' memberships.

Allaying fears

We are learning that the greatest fears of small business owners concern the following:

- how to gain financial assistance to purchase the technology necessary to comply;
- how to obtain up-to-date information on the technology that meets regulatory requirements and is economically viable; and
- how to avoid being penalized before they acquire the technology necessary for compliance

Financial Assistance

Finding the dollars to assist the small business owner/operator in the purchase of control technology is our greatest challenge.

For the past year, our Ombudsman has visited with financial institutions around the state in an effort to locate sources of funding for small business enterprises.

Adding environmental controls seldom increases cash payback or increases productivity. Therefore, our financial institutions have not shown great interest in funding the technology to keep these enterprises up and running. Perhaps part of the problem is a lack of understanding . . . businesses that do not, or financially cannot, afford to comply may be lost to our state's economic base. That loss will mean an accompanying loss of jobs. Texas cannot afford that loss.

In the hope of creating better understanding, I have begun appointing Small Business Advisory Committees in each of the state's nonattainment areas. These committees are made up of small business owners, environmentalists, regulators, governmental representatives and representatives of the financial community. We are creating an environment where small business and financiers can meet eye to eye.

Later this month I will be meeting with Carol Browner, the newly named Administrator of EPA. I will urge her to reinstate contact with the Small Business Administration to sign a memorandum of understanding (MOU) that will provide loan guarantees to small business owners for the purchase of environmental control technology. I urge you to do the same.

In addition, I would encourage you to promote the development of a low interest loan program that will allow small business owners to buy the technology they need to help us clean up our air without running the risk of losing these businesses. completely. We believe that most small companies are willing to work with us toward compliance. but, they need our guidance and the wherewithal to make this reality.

Technical Assistance

Another major concern of small business owners and operators is a lack of technical knowledge. There is great fear that business owners will make a major investment in control technology and that it will be the wrong technology . . . equipment that may not meet the regulatory standard . . . where precious dollars will have been spent, and emission levels will not be reduced adequately to prevent penalties.

You have asked how manufacturing assistance centers—such as the National Institute of Standards and Technology's Manufacturing Technology Centers can be of assistance. This is the place. Imparting knowledge of technology to small businesses in language they understand would constitute a major positive achievement.

And, involving the private sector in the research and development of better products, more environmentally safe products, will need to be a major focus. Also, business and industry can be a major resource in adapting technology that has been developed for large industry for use in small business applications.

Working with the state's higher education system, we hope to develop the resource centers that can provide community-based sources of technological information. To this end, we are already beginning to meet with the Technology Transfer Institute and the Environmental Research and Training Institute at the University of Texas at Arlington. Initial contact has also been made with two of the sixteen Small Business Development Centers along the Texas Gulf Coast that are tied to the Governor's Job Development Program, local universities and junior colleges, and the Texas Department of Commerce.

Fear of Penalties

To help allay fears that business will be penalized before it has had a chance to take compliance action, and the fear that conversation with agency staff will lead to targeting for violations, we have taken several positive steps.

First, we have established a policy of confidentiality within the jurisdiction of the Ombudsman's Office. Any information obtained by this office regarding a small business' compliance difficulties will not be passed to the agency's Compliance Division for action. Second, we have developed a Minor Source Policy that will eliminate the penalty for a first infraction, and we will be developing a creative penalties program which will be directed toward compliance with the law, rather than fines that will only deplete the small business' resources.

We are hopeful that these strategies will be useful in bringing our small businesses into the regulatory framework, and we welcome your assistance and suggestions.

TESTIMONY TO THE U.S. SENATE COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON CLEAN AIR AND
NUCLEAR REGULATION
WASHINGTON D.C.
MARCH 10, 1993
PRESENTED BY JOHN D. DUNLAP
CHIEF DEPUTY DIRECTOR, EXTERNAL AFFAIRS
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

I am John D. Dunlap, Chief Deputy Director for External Affairs, California Department of Toxic Substances Control, California Environmental Protection Agency. It is a pleasure to provide testimony on behalf of Governor Pete Wilson and the California Environmental Protection Agency. In April of 1991, Governor Wilson formally proposed the creation of the California Environmental Protection Agency (Cal/EPA). In so doing, the Governor fulfilled a campaign promise to coordinate the state's environmental quality programs and assure that there is a cabinet-level voice for environmental quality in concert with the natural resource protection responsibilities of the Secretary for Resources.

As a result of the reorganization process, Cal/EPA currently consists of:

- The Office of the Secretary
- Air Resources Board
- Department of Pesticide Regulation
- Department of Toxic Substances Control
- Integrated Waste Management Board
- Office of Environmental Health Hazard Assessment
- State Water Resources Control Board and Regional Water Quality Control Boards

I will discuss programs currently in place or in the process of being implemented that are designed to assist small business with environmental compliance. My testimony today will directly address those items that your Committee requested.

Permit Reform

Cal/EPA recognizes that obtaining a permit is a costly and time-consuming process for businesses, especially small businesses. That is why Cal/EPA has made permit reform one of its first objectives. However, permit reform should not be perceived in any way as a weakening of California's tough environmental standards. Gov. Wilson and Cal/EPA believe strongly that there cannot be any false choices between a healthy economy and a healthy environment; the two go hand-in-hand. Permit reform can facilitate economic growth without reducing environmental standards.

Cal/EPA is developing a uniform environmental permit and uniform permit appeal process. The goal is to enable a business to only have to obtain one permit, containing all applicable requirements, instead of multiple permits from various state agencies. A discussion paper was released in March 1992 containing draft options for achieving greater coordination in the environmental permit processes, and public comments have been obtained through a series of public meetings and written comments. Cal/EPA has moved forward to implement individual

items covered by the recommendations, but the majority of these reforms will be put in place based on details to be developed by several task-force groups now being formed.

During last summer, Cal/EPA opened a one-stop permit and license center in Los Angeles near the area affected by the civil unrest. The purpose of the center is to provide expert advice and assistance to businesses within the Los Angeles Revitalization Zone that need state environmental permits. The center represents one location where businesses can go for permits, variances, information on pollution prevention and assistance on state environmental laws.

One concern of many companies is the length of time it often takes to obtain a hazardous waste treatment, storage and disposal permit. Cal/EPA's Department of Toxic Substances Control is implementing a fee-for-service program that should especially benefit small businesses. In the past, some smaller businesses have had to wait while the Department focused its limited resources on the most complicated and critical permit applications. With fee-for-service, businesses that are willing to pay the cost of the Department's services will be able to have us promptly review their permit applications. Business will receive an improved level of service, and the Department will be able to make an increased number of permit determinations.

The Department is implementing a similar fee-for-service program in its site mitigation program. Businesses will be able to pay a fee covering the cost of Departmental oversight of site cleanups. In the past, businesses anxious to clean up small sites have had to wait while the Department focused its energies on high-priority sites. The new program will allow for more site clean-ups and create opportunities for economic development at those sites.

California Environmental Technology Partnership (CETP)

Under the leadership of the Cal/EPA and the Trade and Commerce Agency, the California Environmental Technology Partnership (CETP) is a public-private partnership among state government, industry, academia, financial institutions, public interest groups, and federal/local governments. CETP's purpose is to promote the research, development, commercialization and export of environmentally beneficial technologies, goods and services. By forming this partnership in September 1992, and outlining its importance in his State of the State Address on January 6, 1993, Governor Pete Wilson has stressed the need to maintain California's high environmental standards, reform California's cumbersome environmental permit processes, and strengthen California's competitive posture by promoting its environmental industry. There are several services CETP will provide. Here are just a few:

- provide permitting and other regulatory assistance

- link foreign customers with California-based businesses
- facilitate joint research, development and commercialisation projects between California environmental technology industries and Lawrence Livermore, Lawrence Berkeley, and Sandia National Laboratories in California.

Section 507 of the Clean Air Act Amendments of 1990

The California Air Resources Board operates a compliance assistance program training businesses to comply with air-quality rules. The Board, in cooperation with the California Pollution Control Financing Authority (CPCFA), assisted in the development of a \$3 million bond program making low-interest, long-term loans available for the purchase of pollution-control equipment. Loans as low as \$10,000 are available, giving small businesses such as gas stations and chrome-plating shops access to the same type of equipment financing as large companies have had for years. In addition, businesses can access a technology clearinghouse for information on equipment to control all types of emissions. The Board has also created an easy-to-use computer model to aid small businesses in conducting low-cost risk assessments.

As required by Section 507, a small-business ombudsman position which will assist businesses required to obtain operating permits. The ombudsman will represent small businesses before the permitting agencies, disseminate

information, and resolve complaints. The Board is also implementing an outreach program to disseminate air pollution information germane to small business.

California's Manufacturing Technology Center

In 1992, the State of California received an award of \$12.9 million in federal funding from the National Institute of Standards and Technology to establish the Manufacturing Technology Center. The mission of the center will be to facilitate the transfer of manufacturing technology to the state's small to medium-sized aerospace suppliers. A first step in assisting these businesses with a global market, is assisting them with hazardous waste reduction or in notable cases, pollution prevention.

Cal/EPA's Department of Toxic Substances Control has entered into a partnership with the California Manufacturing Technology Center to showcase alternatives to traditional solvents widely used as cleaning solutions. As you know, The Montreal Protocol treaty asked participating nations to agree to phase out solvents which are damaging to the upper stratosphere ozone layer, mainly chlorinated solvents. Two events are scheduled for the summer of 1993 in California to assist affected businesses to find appropriate alternatives. The expositions are designed to allow vendors of alternative cleaners to display their products. Small businesses will be invited to bring representative samples of

soiled machinery from their process to test the effectiveness of alternative cleaners prior to any capital investment. These expositions will be also be open to the general public and the environmental community free of charge. Local organizations have also been invited to sponsor these events. Informational exhibits will be available. These will be community based events.

By the end of August 1993, the center's communications network will be in place and a demonstration center will be operational that allows vendors to demonstrate state-of-the-art technology for integrated manufacturing processes. Cal/EPA's Department of Toxic Substances Control believes that by entering into this partnership, we will provide the stimulus that brings this to fruition.

California's Regulatory Assistance Program

The Office of Regulatory Assistance was established to assist industry to comply with and have direct input into the development of environmental regulatory proposals. The office emphasis is facilitating, educating and improving the regulated community's understanding of hazardous waste management and pollution prevention.

Associated with this effort are four regional ombudsmen who act as liaison for the Department with the public and regulated,

community, focusing again on small business. They investigate and facilitate citizen/industry resolution of complaints. For example, many business communities in California are comprised of ethnic groups who find it difficult to understand laws and regulations that are published only in English. The ombudsmen work individually in helping these businesses understand environmental regulatory requirements. In addition, they are available to educate citizen groups on regulatory issues in meetings, speeches and presentations.

Another related program is consultative services. Recently passed state legislation authorizes the Department of Toxic Substances Control to enter into an agreement, upon receipt of a written request, to perform one-on-one consultative services to assist a business comply with applicable laws. When scheduling on-site inspections, priority is given to businesses with fewer than 50 employees. In order to recover costs, the Department can charge an hourly fee for this service but only upon the request of the regulated entity.

In another area of regulatory assistance, two of the Department's technical experts have developed a computer program called SPECTRA -- which stands for Software Program Exploring California Toxic Regulations & Acts. This software readily provides information on the state and federal land-disposal restrictions, waste code definitions and the hazardous waste laws

and regulations. We are so impressed with it that we are planning to market it to private industry, consultants, law firms and others. SPECTRA can make it easier for firms to comply with our laws, and we are proud to be able to offer this tool to the regulated community.

California's Technology Clearinghouse

The Technology Clearinghouse was established in January of 1988. The objective of the clearinghouse is to provide a focal point for the development and dissemination of technical information on source reduction, recycling, and treatment technologies and strategies. The goal is to insure that any interested party has access to comprehensive information on waste reduction. One component of the clearinghouse is the outreach program which consists of the development of a series of industry-specific waste reduction guidance documents and fact sheets. I have brought a number of these with me today for your information. These fact sheets focus on informing industry of the available waste reduction options and encourages them to request and implement the options outlined.

The Department of Toxic Substances Control, as do all boards and departments under the leadership of the California Environmental Protection Agency, plays an active role at environmental trade shows and conferences by providing speakers on timely issues and by staffing exhibits which provide these

publications free-of-charge to those requesting them. In a similar manner, this same service is marketed to industry associations. Additionally, the clearinghouse sponsors industry-specific waste reduction symposia and conferences.

USEPA/Department of Toxic Substances Control Collaborative Effort

The Department of Toxic Substances Control and USEPA, Region 9 are completing final details on the development of compliance and pollution prevention workshops to be presented to small quantity hazardous waste generators that operate in rural counties. These workshops will be provided at no charge, with both agencies sharing the cost. These are scheduled for summer, 1993.

North Coast Regional Water Quality Control Board

The Department of Toxic Substances Control, along with other Cal/EPA Boards and Departments and local agencies, is currently developing environmental training for small businesses within the North Coast Regional Water Quality Control Board jurisdiction. This jurisdiction includes Humboldt, Mendocino, and Trinity counties among others. These counties cover the northern, rural area of California. This program is designed to meet the regulatory compliance needs of the small business community. The workshops will be delivered during the evening hours therefore, it will not be necessary for participants to take time away from work. Again cost will be borne by participating agencies.

Maquiladoras

The Department of Toxic Substances Control has entered into an informal partnership with the Institute of the Americas, Southwestern College and other educational consortia located near the California/Mexico border, who are interested in providing hazardous waste management education for small businesses operating on both sides of the California/Mexico border. The Department is in the process of formalizing our relationship with the Mexican government to establish protocol for administering these programs.

Center for Environmental Education

A Department of Toxic Substances Control representative participates on the advisory committee of this non-profit organization whose objective is to provide useful, easily understood environmental training and education to the small business community. This advisory committee is comprised of high level representatives from government and the private sector.

Business Environmental Assistance Center (BEAC)

Cal/EPA is committed to providing technical support to the Business Environmental Assistance Center (BEAC). The BEAC is a clearinghouse of financial, environmental and general business information for the small business community. Sponsors of the BEAC include the California Department of Commerce, South Coast Air Quality Management District, the Chancellor's Office

California Community Colleges Economic Development Program, and the North Orange County Community College District (Fullerton Community College).

Environmental Compliance Support Association of California (ECOSA)

ECOSA was formed with the overall objective of protecting jobs, business competitiveness and the environment by helping smaller businesses comply with federal, state and local environmental regulations. ECOSA is a not-for-profit, public-benefit membership organization operated entirely within the private sector and separate from governmental agencies. It has been described as an environmental compliance auto club and is the first organization of its kind in the United States. Cal/EPA is committed to working closely with ECOSA in providing technical information, participation at meetings and other appropriate support.

Targeted Opportunities to Prevent Pollution in Stockton (TOPPS)

The Department is actively pursuing the reduction of hazardous waste and pollution in California. An example is the TOPPS projects in the greater Stockton area. TOPPS is a Department of Toxic Substances Control project designed to demonstrate that opportunities exist at the local level to reduce the amount of hazardous pollutants being discharged to air, land and water, and that pollution prevention opportunities are good.

for business and the environment. This is a pilot awareness program designed to educate and assist the public and private sectors of Stockton.

Cal/EPA Help Lines

Each of the boards and departments under Cal/EPA leadership provide help desks or duty officers. One example is the help desk within the Cal/EPA Office of Environmental Information which provides sources of data designed to assist the regulated community with compliance and provides direction to appropriate offices to address their questions. Another example is the duty officers who work in the Department of Toxic Substances Control regional offices located in Sacramento, Berkeley, Glendale and Long Beach. The duty officer's responsibility is to handle the hundreds of phone calls received daily. They are trained in and acquainted with Departmental program elements as well as the regulatory responsibilities of USEPA and Cal/EPA. All of these offices offer a friendly, person-to-person contact for the business community.

That concludes my testimony. Thank you for the opportunity to share with you a brief synopsis of California's efforts to assist small business to comply with environmental regulations. I would be happy to answer any questions you may have.

STATEMENT OF PHILIP NANZETTA, MANAGER, MANUFACTURING TECHNOLOGY CENTERS, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, DEPARTMENT OF COMMERCE

My name is Phil Nanzetta. I manage the Manufacturing Technology Centers (MTC), State Technology Extension Program (STEP), and related technology deployment activities at the National Institute of Standards and Technology (NIST). In this capacity, I participate in the interagency implementation of the Title IV defense conversion programs along with colleagues from DARPA, NSF, DOE, and NASA. I also work on the research side of NIST as manager of the Automated Manufacturing Research Facility (AMRF).

I appreciate the opportunity to appear before you today to discuss our experiences in working with small manufacturing firms to help them improve their environmental performance and their competitiveness.

There are seven NIST MTCs, located in New York, Ohio, South Carolina, Michigan, Kansas, Minnesota, and California. They work directly with small firms, both on-site and in central demonstration facilities, to help them utilize appropriate advanced technology and techniques to improve their competitiveness and improve the number and quality of jobs they provide. The NIST program has formed linkages with other agencies to provide services and assure coordination; these linkages include EPA; Department of Labor; SBA (for loan guarantees); DOE and its major laboratories; and DOD and its laboratories and centers of excellence, arsenals, and programs. Through these and other linkages, the MTCs are able to bring the full spectrum of necessary services to bear for their client firms: business planning, financing, workforce training, activity-based accounting, etc. We have taken the approach of building on existing strengths and resources, coordinating carefully, and avoiding duplication of effort.

The STEP program concentrates on helping states plan and develop state industrial extension infrastructure. In addition to funding, the program provides technical assistance, and organizes regional activities that help to coordinate various state-based activities. The STEP program has worked with a total of 34 states to date, counting both grant recipients and states which have participated in regionally based activities sponsored by STEP.

President Clinton, in his state of the union message and subsequent Technology for America's Economic Growth urged two actions which are particularly relevant to the present topic. The first action is to "Develop a national network of manufacturing extension centers to help small and medium-sized businesses gain access to technology". The aim is improved competitiveness of these firms and an increase in the number and quality of jobs they provide. The second action is to "promote environmentally conscious manufacturing . . . NIST, working with EPA, DoE, and state agencies, will undertake a technical support program in energy and environmental waste minimization for small and medium-sized firms".

Commerce Secretary Brown, in testimony before the Senate Commerce Committee and House Science Committee on S. 4/H.R. 820, National Competitiveness Act of 1993, supported the principles of those bills which will allow the Department of Commerce to develop a "one-stop shopping" network of manufacturing extension centers to serve many of the 350,000 small and medium-sized manufacturers.

The expanded manufacturing extension programs and state industrial extension activities called for in S. 4/H.R. 820 would offer excellent means for reconciling the tension between two important national goals: the business success of our small manufacturing companies and the desire to pass a clean environment along to our children and grandchildren. The present NIST MTCs and STEP-supported activities have begun to build a base of experience helping small companies apply technological solutions to their needs for environmentally conscious manufacturing. Some examples:

The Great Lakes MTC (GLMTC) in Cleveland, OH conducted a waste-reduction study for Cleveland Wood Products a manufacturer of brush rolls for vacuum cleaners. GLMTC staff helped Cleveland Wood management to identify waste types, sources and volumes, as well as reduction opportunities. The most immediate result was conversion from a solvent-based to a water-based paint, addition of a bag house to collect sawdust for recycling and a doubling of the number of dowels on the production line to catch paint spray. Thus far the company is generating a \$40,000 annual cost savings and keeping the environment clean in the process.

A Greenpoint, New York manufacturer of metal parts was unable to achieve a satisfactory finish with the waterbased lacquers being used to comply with solvent related regulations. The Northeast MTC (NEMTC) in Albany, NY determined that with better cleaning of the metal parts, adequate paint adherence could be achieved

and subsequently referred the manufacturer to a supplier of appropriate cleaning equipment.

A regional technical assistance provider helped a metal working company eliminate the use of toxic organic solvent 1,1,1 trichloroethane for degreasing some of its metal products by installing a new system for degreasing operations that uses a water-based biodegradable solution. Annual savings for the company were over \$40,000.

In partnership with Allied-Signal's Kansas City Plant (DOE), the Mid-America MTC (MAMTC) is running a series of seminars which explain environmental regulations and technical alternatives for small manufacturers who are using a variety of manufacturing processes including solvents, painting, solid wastes/landfill alternatives, coolants, plating/metal finishing and process waste assessment. The seminars explain the regulations in an understandable manner and then show how the companies can meet the regulations in the lowest cost way. The response from small manufacturers has been tremendous because they feel MAMTC is the only group in the region that can discuss both regulatory and technical issues in layman's terms.

A State Technology Extension Program (STEP) grant has been awarded to New Jersey to allow the New Jersey Institute of Technology (NJIT) to develop two service centers for the apparel and the textile dyeing and printing industries. The NJIT will draw upon its Hazardous Substance Management Research Center to help companies in these sectors meet environmental regulations while improving their competitiveness.

As these examples illustrate, technical assistance providers such as the MTCs can be a lifesaver for a small company which is facing difficult environmental requirements. The results are frequently quite striking, even to the point of helping the firm save money, reduce waste in the manufacturing process, and utilize materials that in the past were simply hauled off to a landfill.

Of course, the NIST-funded organizations are not alone in helping small companies with environmental-economic issues. Every organization which provides technical assistance to small manufacturers—whether, state-based centers like Pennsylvania's IRCs, community college-based advanced technology centers, or specialized programs like California's aerospace-oriented supplier improvement program CALSIP—has to address environmental-economic issues: this is a very real problem area for the small manufacturers they serve.

All of these technical assistance providers face a problem. In some ways it's the same problem their client firms see: how do they, as small organizations with limited resources, find their way through complex regulations to understand exactly what their client firms need to do, and how do they work through the technological complexities to know the best environmental-economic approach to compliance? By and large they have to invent the solutions themselves—over and over again across the country.

Technology Sources

There are tremendous environmental-technology resources in the Department of Energy's national laboratories and manufacturing facilities and the Department of Defense laboratories, manufacturing facilities, and centers of excellence. A lot of thought by some very smart people, a lot of care, and a lot of money are going into the environmental cleanup agendas of these agencies. Much of what is being developed will be of use to small manufacturers when cost-effective versions are widely disseminated.

Some of the national laboratories are actively interested in making their expertise broadly available to small firms. In many successful instances, they are doing so in partnership with technical assistance providers who have experience working with local small manufacturers. Some examples:

Lawrence Livermore National Laboratory (LLNL) in California is working with the California MTC to use satellite broadcast programs, prepared by LLNL experts, to offer detailed information on technology-based environmental compliance solutions for small manufacturers in California. Recently, other MTCs nation-wide joined the satellite linkup to bring these same offerings to small manufacturers in their regions.

The Department of Energy's Y-12 site at Oak Ridge, TN established an environmentally compliant manufacturing program in 1991. The State of Tennessee and the University of Tennessee Center for Industrial Services have executed a cooperative research and development agreement with Y-12 to make their environmental expertise available to Tennessee companies. Under this agreement, Y-12 development engineers performed work and offered advice to reduce machine coolant waste. Other projects are in the queue.

NIST has an excellent dialog underway with EPA staff members who have responsibility for source reduction. I expect these discussions to lead to concrete joint programs which will help a broad base of small manufacturers on environmental-economic issues.

In September 25, 1992 testimony before the House Subcommittee on Environment of the committee on Science, Space, and Technology, Dr. John Lyons, Acting Under Secretary for Technology of the Department of Commerce, outlined the many areas in which the NIST laboratories are working to provide technology-based solutions for environmental problems. In the interest of time, I won't repeat this information; I have attached a copy of Dr. Lyons' statement.

As with technical assistance providers, expertise on environmental-technology issues is not restricted to Federal agencies. There is an immense base of knowledge in university and industrial laboratories, as well as among commercial suppliers.

All of these technology sources face a problem: How do they make their expertise broadly and easily available as economically viable solutions to the problems of small manufacturers.

Before I go further, I should stress for you—this is a very important point—that the technology sources I am talking about want to find away to make their environmental-technology solutions broadly available in economically practical form. Likewise, the people in EPA with whom we are working want to help small manufacturing firms achieve results through the application of appropriate technological solutions. They don't need to be compelled to do it, just enabled.

I would like to emphasize the importance of an integrated approach which maintains a firm connection between extension services aimed at competitiveness and those aimed at environmental clean-up. If companies are to be both competitive and clean, then extension efforts must enable them to adopt appropriate solutions by systematically and concurrently addressing issues of competitiveness along with environmental issues.

A National Network of Manufacturing Extension Centers

At this point, you can see a picture emerging. The technical assistance providers need "packaged", approaches to environmental-economic problems. Technology sources need a "packaging" and distribution mechanism for their existing environmental-technology.

The commitments of President Clinton, Vice President Gore, and Secretary Brown to building a network of manufacturing extension centers, and their support for the framework of concepts and approaches to manufacturing extension spelled out in 5.4 and H.R. 820 offer a means for building a national "distribution mechanism" that will bring the technology sources and technical assistance providers together.

In the upcoming competition for defense conversion activities, the interagency working group will begin to stimulate ideas and conduct pilot tests for this "packaging and distribution" mechanism. I will be able to say more about this after the program descriptions are made public.

So we are in the wonderful position of having rapidly converging policy agreement; a source of funds to use for stimulating ideas and pilot-testing concepts; ready, competent technology sources; and an emerging network of technical assistance providers to work directly with small and medium sized manufacturers. As I used to say when I taught calculus, "The rest is just details, left for homework."

As we work through the implementation of the programs described here, we plan to follow the approach which has been successful with the MTCs: build on existing strengths and available resources, form working linkages with other organizations or agencies to accomplish joint objectives, encourage the development of new approaches, listen, carefully evaluate outcomes and steer the development according to results, and never, never forget that the objective is to help small manufacturers become more competitive, increase the number of jobs they support, and improve the quality of working life in those firms.

Let me repeat that I appreciate the opportunity to appear here today. Thank you, Mr. Chairman. I would be happy to answer any questions you may have.

STATEMENT OF BENJAMIN Y. COOPER, SENIOR VICE PRESIDENT, PRINTING INDUSTRIES OF AMERICA

Mr. Chairman and members of the subcommittee on Clean Air and Nuclear Regulation, I want to thank you for the opportunity to appear before you today. My name is Benjamin Y. Cooper. I am Senior Vice President for Government Affairs for the Printing Industries of America. I also appear today as Chairman of the Environment Committee of the Small Business Legislative Council. SBLC is a permanent

coalition of more than 100 trade associations representing a broad range of small businesses in the United States. We are pleased to have the opportunity to address the small business compliance program in the 1990 Clean Air Act reauthorization and other small business compliance challenges.

Mr. Chairman, few issues increase the level of anxiety in today's business climate more than environmental regulation. The anxiety is not caused by a reluctance to provide a cleaner workplace but by unknown liability and a confusing and often overly complex array of regulations and reporting requirements which frankly are beyond the ability of many small business owners to meet. In 1991, the Printing Industries of America did a study of current Federal environmental reporting requirements that a small printing company might have to meet. To our amazement there were at least 46 reporting requirements. Of course, this does not include any additional state and local reporting requirements.

Each requirement and each report has a specific purpose and was approved with good intention but the cumulative impact is overwhelming to a small business person who also is responsible for meeting payroll, paying taxes, hiring and firing and turning the electricity on and off.

We really did not need a study to tell us that there are too many reporting requirements. Our members have told us for years. In response to the concerns that our members raised over the years, representatives of PIA, SBLC, the American Furniture Manufacturers Association and the National Federation of Independent Business began meeting in 1987 to discuss ways we could assist our member companies deal more effectively with the anticipated Clean Air Act reauthorization. Our efforts led to the development of Section 507 of the Act, the small business compliance and technical assistance amendment.

The underlying principle of the groups which worked for the passage of this amendment was that we would not support an exemption for small business from the requirements of the Act. We only wanted to simplify compliance. While the amendment did not do exactly what we had hoped, we were pleased that small business was given a program, which if properly implemented would provide significant assistance to those companies facing compliance problems.

Of course, like any program of this type, it is only valuable if it is properly implemented. While it is still too early to determine if the program is a success or not, we believe the program is not being properly implemented. The Small and Disadvantaged Business Office of the Environmental Protection Agency has done a terrific job of attempting to have the program implemented properly; however, I cannot give the same endorsement to the Agency as a whole. The central problem I see with the Agency's treatment of Section 507 is that education and assistance simply does not have the same value at EPA as enforcement. Although states are required to have a proper Section 507 program as a condition for approval of State Implementation Plans, we would be surprised if any state's plan would be rejected because of the lack of a proper small business assistance program.

At the state level, we are aware of several states that are evidently attempting to put a program in place. Texas, Indiana, California, and New York are examples of states where our members are aware of such efforts, but the outreach to the small business community at the state level has been slim.

It is our hope that the new Administration will make a more concerted effort in this regard and that greater encouragement will be provided to the states to develop programs.

One of the major problems associated with compliance with the Clean Air Act, or any other statute, is that there is little integration of requirements between the state and Federal Government so that by the time an effective program is developed at the Federal level, the states have implemented much more onerous regulations at the state level. Consequently, the Federal assistance program is too little too late. An example of this problem is the major source designations in the Clean Air Act. Most of the State of Maryland is considered "severe" for Clean Air Act purposes so the major source level is 25 tons per year of volatile organic compounds. In the printing industry, there are companies already being regulated at 2 1/2 tons as major sources. For these companies, a compliance and technical assistance program may be of little value. Likewise in California, printing companies are regulated at four tons per year. Companies in Maryland or California have no more resources than companies in Maine or Oregon but they have far greater compliance burdens.

I am not sure that all the problems of small business can be addressed by programs such as Section 507, but we feel there are improvements which can be made to make such programs more useful. As an example, adequate funding must be made available to enable EPA to work with the states to develop such compliance assistance programs. Unfortunately, Section 507 program development came before

the permit fees will be in place so there was no immediate revenue source for the program and Congress chose to appropriate a very small amount for the program in the first year. This lack of funding delays the program.

EPA must be given proper incentives by Congress and, in turn, EPA must give incentives to the States to implement programs such as Section 507. We recommended in the legislation that the states be given air emission reduction credits for implementing a proper small business program. It was our contention that education and compliance assistance would result in a reduction of emissions that likely would not be subject to rigid measurement. We were unsuccessful in this effort but we still believe the types of assistance we are discussing will not succeed without such incentives.

Small business issues must be given proper standing at EPA. In the previous administration the Deputy Administrator was a strong advocate for small business; however, that advocacy did not overcome an agency bias in favor of bigger business. Evidently, it is easier for EPA to work with a handful of big businesses where results may be more dramatic than to work with the mass of small businesses. Perhaps raising the profile of the small business office of EPA would help that effort. We would recommend the establishment of an office of small business advocacy in the Administrator's office.

Finally, the Congress and EPA must understand just how far down the business scale regulations have gone. Companies with ten employees are now subject to reporting requirements, and companies with twenty employees are major sources. We are no longer speaking about corporate giants when we talk about regulated companies. Companies with fewer than 50 employees are part of Superfund actions, they are required to file state and Federal right to know reports, and they must find waste haulers and disposal sites the same as the largest companies. However, few of these smaller firms can afford environmental specialists to keep up with the regulations.

Mr. Chairman, I would now like to take a few minutes to discuss some of the current environmental concerns of small business and provide some recommendations for making life easier. As stated earlier, there are too many Federal reporting requirements. These reporting and permitting requirements can and should be consolidated. We believe it is possible to have a single annual environmental report for the majority of small businesses which would provide the Federal Government with all the information it needs from small business. We also believe that such reports would be more accurate than the current array of reports. These reports would cut across the various environmental media.

Environmental regulations should also be cross media. We are at a stage now where actions taken for the sake of the environment in order to address a clean air concern can create waste or water problems. In a small business, such actions can be very frustrating. A multi-or cross media regulatory program will help avoid such problems.

Also Mr. Chairman, we need to put liability in it proper context. I do not believe the Congress ever intended small business to be as immersed in the Superfund program as it is. Small companies which properly disposed of waste ten years ago now find themselves being told that they are liable for cleaning up that properly disposed waste. No one disputes the rationale for sharing the cleanup cost; for the small businesspersons it is the lack of predictability and the realization that they are involved in something totally beyond their control that causes the problem.

The subject of waste disposal is a particular problem for small business because of the enormous expense associated with paying someone to haul away small amounts of waste and the expectation that the small company will have visited the waste site (which may be hundreds of miles away) and evaluated the management of that site. Congress could assist small businesses in the waste disposal area by allowing them to pool their efforts to contract for waste hauling and by charging a simple fee to cover potential liability if a properly managed site of today becomes improperly managed in the future.

Finally, we need to integrate state and Federal regulations. We understand that the states must have the flexibility to have more stringent regulations than the Federal Government, but if we are to do that, then we should let the state program be the program. We should not layer a Federal program on top of the state program. We have not seen the full effect of this yet but we will with the Clean Air Act implementation where the structure of permits and reporting will change dramatically in the next few years.

We have been working with various members of congress in developing some legislative proposals to address some of the simplification efforts I have addressed. This

hearing is an important step in that process. We appreciate your efforts to address this important area and look forward to working with you.

WRITTEN STATEMENT OF THE NATIONAL METAL FINISHERS

Introduction

The National Association of Metal Finishers (NAMF) represents the interests of over 800 member companies in the Surface Finishing industry. NAMF members provide electroplating and other surface finishing techniques for a variety of industries including, medical, automotive, aerospace, defense and general industry. Surface finishing is accomplished as a service performed on customer owned parts, "job-shops," and in "captive shops," surface finishing operations integrated within larger manufacturing operations. Either way, these operations impart an array of characteristics to finished parts, industrial components and products. Primary characteristics are corrosion and wear resistance. Without this protection, our society would find it necessary to replace items such as automobiles, other consumer and industrial goods with much more frequency. This fact results in an intrinsic environmental benefit to society provided by the activities of the Surface Finishing industry. Industry processes reduce the need for basic metals and other resources through increased product longevity.

For the purposes of the Clean Air Act and other environmental statutes, the NAMF membership can be characterized as "small business" in every way. The most recent data reviewed by the industry indicates that the average surface finishing firm employs 24 or fewer persons. In addition, the amounts of air pollutants emitted by this industry are small. In the "air toxics" categories emissions are generally amount to only pounds per year. The industry expects to be regulated as an "area source" (less than 10 tons per year) for most emissions.

NAMF Activities on Clean Air Act Section 507 Program

NAMF has been involved in the implementation of Section 507 during legislative deliberations and through participation in review of the 507 Guidelines For Implementation during trade association review activities initiated by EPA. NAMF has also provided information to its members around the country informing them of the state requirement for adoption and urging involvement of members in the establishment of Compliance Advisory Panels and other program elements.

To date, NAMF member feedback on the effect of these programs indicates that effective outreach specific to the Clean Air act permitting requirements and the small business technical assistance program requirements has been limited. NAMF members report that in general, non-attainment VOC, NOX and other ozone precursor emissions reduction programs and permitting have not yet affected NAMF small business members. Members report that they are aware of SIP modifications submitted in non-attainment areas but that states are generally waiting to implement modified or altered permit programs. The association assumes that although 30 plus states have submitted Small Business Technical Assistance program outlines to EPA, implementation of the 407 program will occur as permitting programs are initiated.

Section 507 Implementation Issues

NAMF would like to call the subcommittee's attention to the following specific implementation issues. First, in those states that have not begun implementation, the association notes that states must begin to implement programs, not just submit plans to EPA prior to initiation of permit and other programs late in 1993 and in early 1994. States have cited lack of funds and personnel as the major reasons for delay. The 507 program and any others contemplated by the Federal and state governments must make adequate provisions for resources for implementation.

NAMF and other trade association continue to raise the issue of the confidentiality of environmental audits or discovery of noncompliance during program technical assistance activities and how these would or would not be used for enforcement actions. As with any compliance assistance program run by a government agencies, small businesses are reluctant to provide information or access if the possibility of enforcement will result from a good faith effort to comply or determine compliance.

State Assistance Programs Planned or Now Available-NAFE Activities

The Connecticut Department of Environmental Protection (DEP) has a small business assistance program on the drawing board to help with Clean Air act compliance. They currently have an ombudsman available to channel information between the bureau and private interest which includes a resolution policy for permitting.

Conntap (Connecticut Technical Assistance Program) is part of the Connecticut Hazardous Waste Management Bureau which is a quasi-governmental group which

provides education (Seminars), maintains a library of research material available to the public, a matching grant program for Pollution Prevention (a 50/50 split of money for a P2 project that meets listed criteria and is limited to \$5,000). Most recently, a site-visit waste minimization audit program conducted by retired professionals has been implemented.

The Connecticut Association of Metal Finishers is a state organization of metal finishers with approximately 130 members. CAMF has been instrumental in proposing the formation of the Business Environment and Energy Outreach Center for Connecticut industry. As planned, the center will provide environmental compliance information to Connecticut industry in general. CAMF has been the original advocate for the Center. The initial focus will be the metal finishing industry with other targeted industries to follow such as screw machine and stamping, car washes, dry cleaning and motor vehicle repair.

The Center is to consist of four programs: the Environmental and Energy Information Clearinghouse; the Center for Innovative Pollution Prevention Technologies; On-site Technical Assistance; and Green Industry Exporting Assistance. The Center is to be funded by a combination of public and private sources including government funding; corporate grants; membership fees; contributions; and funds dedicated by environmental enforcement settlements.

NAMF's affiliates and national organization have been active with pollution prevention technology assistance in other parts of the country. The association's northern California affiliate, the Northern California Association of Metal Finishers has been working to establish an "Applied Pollution Prevention Technologies Demonstration Laboratory" in northern California. The project envisions a laboratory facility that will actually demonstrate pollution prevention techniques in scaled production processes and demonstrate the value and practicality to industry members. The project has promotion of clean technologies and preservation of high technology jobs in northern California as its goals. NAMF has initiated dialog with national laboratories in the area on this project.

In Washington, NAMF was a member of an EPA National Advisory Council for Environmental Policy and Technology, NACEPT, focus group which produced a report in December of 1992 Entitled "Improving Technology Diffusion for Environmental Protection". The report makes a series of recommendations regarding EPA's role in distributing or diffusing environmental technologies and specifically points to technical assistance activities and increased research and development in order to encourage pollution prevention in industrial sectors.

Conclusion

NAMF has encouraged development and implementation of technical assistance programs at the Federal and local level through its Washington based activities and through the activities of its affiliates. The association and industry in general are concerned that the constant increase of environmental regulations and reporting requirements threatens to overwhelm the average small industrial enterprise, and at its worst, firms will not be aware of environmental compliance requirements before they become subject to enforcement. Trade association activities help fill the gaps in dissemination of information and compliance advice, however, programs such as the Clean Air act section 507 Small Business Technical Assistance program must become a standard part of environmental legislation and subsequent regulation.

A quick assessment of impending environmental mandates exclusive of any additional legislation from this Congress illustrates anticipated increase in burdens to small business that have not had previous environmental compliance experience. The Clean Air act has been discussed, non-attainment provisions, permitting, emergency release requirements, air toxics provisions all will be implemented over the next few years. In Clean Water Act programs, new effluent guideline categories for industry are expected to impact smaller and smaller service sector firms. Categories such as industrial laundries, and small metal working shops under the Machinery Manufacturing category now under development will impact an estimated 100,000 facilities, many of them small businesses. Storm water permitting program implementation has soaked up trade association, business and state environmental program dollars and time. This commitment for storm water programs has just begun.

NAMF is serving on another recently convened NACEPT group charged with reviewing the requirements of the Pollution Prevention Act of 1990, waste minimization, pollution prevention reporting requirements. A primary issue, many small service sector facilities simply can not make accurate predications of releases nor pollution prevention strategies for coming years. NAMF members and other service sector industries activities are based on customer demands that often do not have contract terms beyond a week, a month etc.

Small business environmental compliance strategies should begin at the very start of the legislative process, be considered in final adoption of legislation and include provisions that make technical assistance and assessment of small business compliance needs a part of every subsequent regulatory step. Environmental agencies should make use of trade association resources, academic and institutional resources, national laboratories, public/private cooperative projects that can help insure that environmental compliance strategies will improve overall environmental protection, not simply result in more compliance burden.

Integration of compliance assistance from top to bottom is key. Industry members know that all the good intentions and deliberations by Congress, EPA and states can be thwarted by a determined permit writer that uses only "checked or unchecked boxes" if that is the only resource he is given to work with when it comes to enforcing environmental laws.

TESTIMONY OF MANIK ROY, PH.D. POLLUTION PREVENTION SPECIALIST, ENVIRONMENTAL DEFENSE FUND

The Role of Environmental Compliance and Technical Assistance in Promoting Pollution Prevention in Small Business

Thank you, Chairman Lieberman, members of the subcommittee on Clean Air and Nuclear Regulation. I am Manik Roy, Ph.D., Pollution Prevention Specialist with the Environmental Defense Fund, in Washington DC. The Environmental Defense Fund, headquartered in New York, is supported by over 200,000 members nationwide, and is a national non-profit organization which links science, economics, and law to create innovative, economically viable solutions to today's environmental problems.

Today I would like to discuss the role of environmental compliance and technical assistance in promoting pollution prevention in small businesses, an issue that I know is a very high priority for you, Mr. Chairman. I will argue that this assistance should be seen as a vital part of our national environmental protection strategy in general, and that, as such, compliance and technical assistance should:

- be developed along with environmental protection standards and compliance enforcement programs as a complete package;
- address all environmental media rather than focus exclusively on any one; and
- particularly provide companies assistance in preventing pollution at the source.

Much of what I will say is as relevant to larger businesses as well and to promoting sound end-of-pipe pollution control strategies as well. However, pollution prevention in small businesses is the most sensitive case: compliance and technical assistance is probably on average more important to smaller businesses than to larger ones, and more important for helping businesses find the right pollution prevention strategies than end-of-pipe control technologies.

Environmental Policy that Treats a Business like a Business

Mr. Chairman, Senators, let us start by assuming that we want to achieve the highest environmental protection goals as part of our overall goal of building and maintaining the strength of the U.S. economy. If we are going to meet our environmental goals, we have to develop strategies for implementing those goals that better reflect the realities of the "customers" of those strategies: those businesses and individuals that generate waste and subsequently may pollute.

In particular, our environmental protection system must stop treating each American business as a collection of smokestacks and drainpipes and begin treating it as a business.

While a business may pollute, pollution is incidental to its existence; its primary concern and resources are devoted to producing a product or providing a service. Because pollution is incidental, a businesses may deny or misunderstand its pollution problem. It may choose pollution control technologies that cost more than they should and protect human health and the environment less than they could. It may solve one pollution problem, only to exacerbate another. And it may consider strategies that cure rather than prevent pollution, which cost more than they should and protect human health and environment less than they should. Any environmental protection system that imposes mandates and responsibilities must address the fact that American industries are first and foremost businesses.

Our current system does nothing of the sort. Regulations are developed specific to single media and in isolation from existing regulations. Guidance, if any, seldom

provides the environmental manager with a clear idea of the business' responsibilities or the best way to meet those responsibilities. Little thought is given to employing policy tools that might economically motivate business behavior.

The Weaknesses of the Neoclassical Microeconomic Model of the Firm

To the extent our environmental policy is based on any logical model of business behavior, it is based on the neoclassical microeconomic model of the firm, according to which a firm is a unitary profit-maximizer with perfect access to information, and government environmental programs operate by intervening in the factor market for pollutant disposal. There are several problems with this model as it relates to environmental protection.

First, as in all markets, good information is important for the pollutant disposal market to function well. However, this market is extremely complex and it is unlikely that many firms have access to adequate market information. This is due largely to the dynamic nature of government intervention in the market. This is a market in which one must consider not only the business and technical issues, but also the actions of executive, legislative, and judicial bodies at the Federal, state, and local level. The people in most firms barely know what questions would be the right ones to ask in this market, whether of their lawyer, their consulting engineer, or the government, let alone how to answer them. In other words, the cost of good information in this market puts good information beyond the reach of many firms.

Information on the pollutant disposal market is costly largely because of the time employees spend gathering and learning the information. Even gathering and digesting all the relevant public information can be extremely costly. One by-product of the costliness of information is that even information about good sources of information is costly. Business people do not always know how best to spend their precious time and money buying information on this market. Instead, they often gather information in ways dictated more by habit than by a logical scheme. Such familiar information sources invariably have strengths and weaknesses: the information is often reliable in some ways, but incomplete in others.

Most importantly, when we allow the collection of environmental regulations faced by any one business to be confusing and we provide no guidance to interpret them or help the business find the best technical solutions for them, we drive up the business' cost of compliance without any concomitant benefit to human health and the environment.

Second, any organization of more than one person faces complexities of internal information flow that often hamper the organization's ability to act as a unitary decision-maker.

Economists who study industrial organization talk about the "agent-principal problem," which explains that the owner of a company, the principal, will always allow the firm's manager, the agent, some amount of discretion, if only because at some point the owner's cost of monitoring the manager's behavior outweighs the expected benefit.

In general, this discretion can be found in supervisor-subordinate relationships throughout the firm. Supervisors would like their subordinates to carry out tasks that best suit the supervisor, but must relinquish some discretion to their subordinates because of the cost of monitoring. These subordinates may exercise this discretion in a way that causes either more pollution or less pollution than we might expect from the firm acting as a pure unitary profit-maximizer.

The cost of monitoring and the attendant problem of internal information flow are even worse in firms where supervisors and subordinates have different areas of expertise. For example, a plant manager who hires one specialist to run the firm's production operation, and another specialist to keep the firm in compliance with environmental regulations, may well have trouble recognizing the overlap between the two. This will hurt the firm's ability to choose the best pollution prevention strategy, since pollution prevention is the process of making decisions about a firm's production operations with environmental protection in mind.

When we write regulations best understood by lawyers and do not provide guidance in language that a plant manager and a production supervisor understands, we drive up the firm's compliance cost without concomitant environmental benefit, in particular by hampering the firm's ability to prevent pollution at the source.

Important Attributes of a Compliance and Technical Assistance Program

Because we have not come to grips with the internal and external information problems that face a firm, we have a system that protects human health and environment less than it could and costs more than it should.

All this argues for a national environmental compliance and technical assistance program with four particular characteristics.

First, the program should be developed along with environmental protection standards and compliance enforcement programs as a complete package. The process of establishing environmental protection standards should not be considered complete until we have established a system for helping business decision-makers - plant managers and production supervisors, in addition to environmental compliance staff—understand their responsibilities and opportunities under the law. Incidentally, if the U.S. Environmental Protection Agency and its state and local partners are required to figure out how to explain the requirements under a set of regulations before finalizing them, they well might flush out and eliminate some of the unintended consequences.

Second, the assistance program must address all environmental media rather than focus exclusively on any one. It is confusing enough for businesses to deal with regulations developed in isolation from each other. A compliance assistance program can only be adequate if it helps a business understand all its environmental protection requirements.

Third, the assistance program should give special emphasis to preventing pollution at the source. A firm's production supervisor often has a different expertise from its environmental compliance staff. By the same token, the consultants, vendors, and information sources from which each draw can be isolated from each other. This directly obstructs the firm's ability to prevent pollution in the production process. An assistance program should seek to bridge the two areas of expertise.

Finally, the assistance program should have a strong local component. While the compliance and technical information may be best developed at the Federal level, the process of delivering the assistance should probably rely strongly on state and local agencies. There is already much expertise in providing such assistance in several state and local programs, and we should enlist that expertise rather than reinvent it.

Up to this point I have been speaking in the abstract. Let me illustrate my points with by briefly discussing the Massachusetts Blackstone Project and a project that the Environmental Defense Fund has recently started with the Council of Great Lakes Governors.

The Massachusetts Blackstone Project

Any project started under Democratic Massachusetts Governor Michael Dukakis and greatly expanded by the seceding Republican Governor William Weld has to have something going for it.

In 1989, the Massachusetts Department of Environmental Protection, under then-Governor Dukakis, decided to do something about the confusing and sometimes conflicting signals sent by the separate air, water, and waste inspectors that could visit any given Massachusetts company.

Like US EPA and nearly all state environmental agencies, DEP's air, water, and waste programs were separate and often not closely informed of each other's actions. This often had unfortunate consequences for the businesses regulated by these programs.

For example, a company could be required by DEP's water program to install a wastewater treatment system, learning only later of the expense and liability associated with the hazardous waste generated by the system. A company installing end-of-pipe control devices to capture waste solvent headed for the air or water might never learn of safe substitutes for the solvent which would obviate the need for the control devices.

DEP wanted to change this and, in particular, wanted to transmit the message that pollution was a problem regardless of media, and that the best way to approach the pollution problem was to prevent it. To do this, PEP came up with the Blackstone Project ¹.

In the Blackstone Project's first pilot year, the project tested different

Over the next several years, businesses in the Great Lakes region will be subject to new Federal, state and international standards regulating pollutants released to the air, water, and in waste. To comply with these regulations, the businesses will invest millions of dollars in capital, consultant fees, and training to protect human health and the environment. Once invested, established compliance strategies may be difficult to rethink. The businesses will make their important environmental protection decisions while taking into account an array of factors, including:

¹ "FY90 Report on the Blackstone Project," Massachusetts Department of Environmental Protection, 1990, Massachusetts State Bookstore, Boston.

- future Federal and state air toxics, water pollutant and hazardous waste standards;
- the permitting, reporting, and enforcement methods used to implement the standards;
- customer demands;
- labor safety and health requirements;
- the availability of pollution prevention and pollution control technologies; and
- the availability of capital

EDF and the Council of Great Lakes Governors is now in process of identifying an industry partner for the project. The industry sector being chosen is important economically and environmentally to the Great Lakes Region, it will be subject to new environmental regulation over the next few years, and it consists primarily of small businesses.

Once chosen, representatives of the industry sector, EDF and CGLG will assemble a team that includes representatives of the industry, its customers and suppliers, Federal and state regulators, state technical assistance providers and the National Institute of Standards and Technology's Manufacturing Technology Centers, labor and environmental groups. This team will take a year analyzing the industry and the pending changes in its environment to recommend the best method of writing and implementing the regulations, providing technical assistance, setting customer specifications, carrying out research and development, and so on to enable the industry to make best use of pollution prevention.

Conclusion

Finally, Mr. Chairman, members of the subcommittee, the Environmental Defense Fund applauds your leadership both in addressing the needs of small businesses and in promoting pollution prevention. We look forward to working with you in these important areas.

Thank you.

TESTIMONY OF THOMAS V. CARVALHO

My name is Thomas W. Carvalho, Vice President of Chem-Tech Rubber, Inc. of West Haven, Connecticut. The comments expressed herein are my own and although I draw upon some twenty years of experience in the small business community, a great deal of what I hope to contribute at this hearing is the result of spending the past five years being actively involved in Connecticut's environmental arena.

Consideration of the extent to which assistance programs (technical or otherwise) may be needed might be better appreciated if we take a moment and remind ourselves of what a small business is up against in maintaining just reporting requirements at this time of year:

March 1st has just past so the Tier II reporting deadline under SARA Title III has gone by; Connecticut's PIQ (Pre-inspection questionnaire) has just arrived along with a new "Multi-media" form to be filled out and submitted in two weeks; the new Emission's Statement arrived two weeks ago and is due April 15th (Tax time!); Form R is just around the corner and since all of the above are related it makes sense to crunch together the data for the July deadline so there is some uniformity in the reports; RCRA hazardous or State regulated wastes must be properly manifested along with the correct land ban forms (Oh my! Have I forgotten to conduct my weekly RCRA inspection?); a new stormwater permitting deadline is rapidly approaching; Thank God this isn't the year for my biannual report to the state on Hazardous Waste; What's This?? The Bureau of Census just sent two voluminous forms that are "required by law": one was due February 15th and one tracking shipments for two particular weeks in March is due by the end of March (Funny, a lot of the data required is something which I've never had to keep track of); new minor boiler blow down and minor non-contact cooling water permits have been taken care of (hopefully); time to do some new TCLP's and conduct an annual audit of the TSDF facility I use for Waste. . . and on and on and on.

Add to the preceding short list of "to do" items the reporting and record keeping requirements that loom upon the horizon due to the Clean Air Act Amendments of 1990 (CAA) and that assistance programs are necessary seems to be a moot point.

The effectiveness of assistance programs depends on a number of factors: the type and flexibility of program, the willingness of both the provider and the recipient to interact and learn from each other, and in the case of small business, having the

knowledge that the programs exist (outreach oftentimes ends up in the recycling bin) and the availability of time to productively utilize them.

Connecticut has a number of programs in place and various sources which to can provide information to aid the small business person in keeping abreast of the ever changing regulations. Having used a number of these resources, I can attest that they are, indeed, effective tools in helping maintain compliance. In fact, Connecticut is tremendously active in this regard and looking at these might well prove beneficial. At the risk of overlooking a particular resource, here are some aids available in Connecticut:

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Although I am not that familiar with the program itself, the state has adopted a "Small Business Assistance Program" along the guidelines of Section 507 of the CAA.

Key elements of this program being the existence of an ombudsman, availability of technical assistance (encompassing such areas as regulatory compliance, technologies, pollution reduction techniques, and accidental release prevention problems), and a small business compliance advisory panel.

A drawback to this type of program is the eligibility requirements which follow the Federal guidelines as depicted in Section 507. To eliminate a "major stationary source" or ones that exceed certain emissions limits, even though they are indeed small businesses takes from these environmentally key sites, useful programs that would then benefit not only the facilities but the neighborhoods and communities around them.

In Connecticut, a new initiative has begun. This effort is an outgrowth of the Toxic Release Inventory (TRI) data accumulated for the year of 1991. The CT-PEP has decided to share their findings with the companies that reported (regardless of size) and through a coordinated effort of all the departments (waste and water as well as air) the department is encouraging joint participation in working toward reductions in the reported chemicals.

Packets were sent out to the TRI contacts at each of the major reporting facilities containing a "1991 Toxic Release Inventory Information Packet" compiled by the CT-PEP, a CT-PEP "Statement on Pollution Prevention," an information packet introducing ConnTAP (a "nonregulatory, quasi-public organization with statutory responsibility to promote the appropriate management of hazardous waste in Connecticut"). A cover letter from PEP Deputy Commissioner Robert E. Moore expresses the Department's sincerest interest "in working with each facility to reduce emissions of all pollutants, including those tracked by TRI". The letter also provides contacts for each separate department and outlines plans to meet with the companies to establish reduction goals.

This co-operative effort reminds me of programs I have heard of in other countries like Japan and Ireland; however, I am told that this initiative is unfunded!! I have discussed this effort with the TRI contact for EPA Region I, Dwight Peavy and we share the concern that lack of funds will make this type of effort short lived.

Likewise, I was informed as late as this Friday, past, that ConnTap is now concerned about receiving additional funding. The current state of the economy is taking an ever broader toll.

CENTERS OF EDUCATION

The various centers of learning throughout the state offer a variety of means to obtain information.

The University of Connecticut has established the Environmental Research Institute and is looking for business partners in need of problem solving. It has been my own contention that entry level fees are too steep for smaller businesses but this is certainly an avenue worth pursuing.

I have in the past utilized two graduate students from the Yale School of Forestry to do a Waste Minimization/Pollution Prevention study of my facility; an excellent effort on their part and one in which we both benefited at no cost to me. There is no reason that this same effort couldn't be applied to technical assistance regarding air emissions.

BUSINESS ASSOCIATIONS

There are many statewide and local associations which both act as either lobbying groups or centers for information dissemination or both. The Connecticut Chemical Council is a newly formed group that is an excellent source of information as is the more established Connecticut Forum of Regulated Environmental Professionals.

The Connecticut Business and Industry Association (CBIA) has established the Environmental Policies Council which maintains task forces which discuss and inform on legislative, waste, water, emergency releases, and air. As the current chair of the Emergency Release Task Force, I hold a seat on the EPC's Steering Committee and can't express how much this group has helped me to keep current with the environmental climate in the state.

FEDERAL

Voluntary programs like the much publicized 33/50 Program, of which we are a part, have allowed me to make some good and helpful inroads at the regional level. These lines of communication have provided a great deal of assistance over the years.

I must say, though, that the reference in my letter of invitation to this hearing regarding the National Institute of Standards and Technology's Manufacturing Technology Centers (MTCs) was one that required no fewer than five phone calls to obtain any information at all; the information being that the closest one to Connecticut is at RPI in Troy, N.Y. I understand that these centers do not currently have an environmental function to them but this seems like a logical extension.

CONCLUSION

Technical and compliance assistance programs will become ever more important as regulations increase, both in number and complexity. Their role at the Federal level, however, is still a question in my mind. Perhaps, the job for the national and regional branches of government is to act as a sort of electronic bulletin board and help the states select the programs best suited for their individual needs.

I would like to see increased co-operation between not only the regulators and the regulates but also the "environmentalists". . . you see, I, too, am an environmentalist and, the current economic climate being what it is, my greatest fear is that the great strides that we have made, at great cost to us all, over the past twenty plus years will be lost and that we will begin to backslide and lose ground.

This concludes my prepared testimony. I would be glad to begin an open dialog and address any additional questions on this matter.

WRITTEN TESTIMONY OF THE LOUISIANA GOVERNOR'S OFFICE OF PERMITS AND LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY BY MARTHA A. MADDEN, COORDINATOR, LOUISIANA GOVERNOR'S OFFICE OF PERMITS AND VIC TOMPKINS, PROGRAM MANAGER, LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Chairman, members of the committee:

It is our pleasure to present written testimony on behalf of the State of Louisiana. We are especially pleased that your committee is taking action to address the implementation of section 507 of the Clean Air Act. Some of Louisiana's main concerns are the financial impact and timely permitting process upon small businesses caused by compliance efforts in meeting the provisions of the Clean Air Act, and the lack of guidance in implementing industry-related control measures of affected small businesses.

ESTABLISHMENT OF A SMALL BUSINESS ASSISTANCE PROGRAM

Louisiana established its Small Business Assistance Program in the Air Quality Division in the Louisiana Department of Environmental Quality with the hiring of staff in August, 1992. Prior to that date, Edwin W. Edwards, Governor of Louisiana, had designated the Governor's Office of Permits as the Ombudsman for Small Businesses. In September, 1992, the first regional Small Business Assistance Program symposium was held. Subsequently, six additional ones have been given. Louisiana is one of the few states in the Nation with a fully operational Small Business Assistance Program.

These programs are mandated in section 507 of the 1990 Amendments for the Clean Air Act that are designed to help small businesses cope with Federal and state air regulation requirements which include operating permits, construction permits, Air Pollution Emission Notice (APEN) Emission Reporting, Pollution Releases, Compliance and Enforcement.

METHODS FOR DISSEMINATING TECHNICAL COMPLIANCE INFORMATION TO SMALL BUSINESSES

Regional SBAP Symposiums are provided to: (1) inform businesses of all requirements of the Clean Air Act that apply to them, and the dates these requirements will apply; (2) help small businesses deal with specific technical, administrative and

compliance problems; (3) disseminate up-to-date information about the Act to the small businesses community, including easy to understand public information materials; and (4) refer small businesses to environmental auditors who can evaluate how effective a company's work practices, monitoring procedures, and record keeping are for complying with applicable clean air requirements (see attachment A).

In addition to the regional symposiums, small business targeted group meetings are held to address specific industry related questions. The Governor's Office of Permits and the Louisiana Department of Environmental Quality jointly produce and publish a quarterly newsletter that is disseminated to over 5,000 owners of an estimated 20,000 small businesses in the State. A toll-free "hotline" offers small businesses an opportunity to have technical questions answered, promptly. We are currently receiving approximately 40 calls per month from small businesses.

AREAS OF CONCERN

One target group meeting was held for owners of gasoline stations in the 6-parish ozone nonattainment area in and around Baton Rouge, Louisiana. Stage II vapor recovery systems will be required for stations who meet the guideline requirements. The information we would like to share with you addresses the economic impact of this regulation along with the concern for the small businesses possibly going out of business. The estimated cost of installation of Stage II vapor recovery equipment is approximately \$2,000 to \$3,000 per nozzle depending upon the size of the service station. Revenue is insufficient to absorb the cost of the equipment installation and still yield a profit during a year. Some owners said they did not see how they could pay for the equipment in 5-10 years and still remain in business. In addition to the cost of the equipment, additional fees will be charged by the Louisiana State Department of Environmental Quality to process a permit application. Louisiana's existing fee program is presently being modified to take these costs into account.

Businesses have expressed other concerns. Delays in getting permits approved make doing business very difficult. There will be a major effort directed at bringing all facilities under some type of permit resulting from the implementation of the Title in Operating Permit Program. As standards are developed under this Title, those small businesses affected by the standard will be required to submit a permit application. Expertise of the SBAP staff will be required to assist these businesses in meeting those expected deadlines. The Governor's Office of Permits has a mandate to assist with this process.

There are thousands of legal requirements under the environmental laws. While the Small Business Assistance Program is designed to assist firms in areas of compliance with the Clean Air Act and its amendments, additional needs are being raised now in regards to compliance with other areas of environmental regulation.

A small plastics fabricating company complained during a regional symposium that an inspection of their facility was carried out in "military fashion" and cost them several thousand dollars. They wanted some assistance in preparing for an inspection and what to expect. They also wanted to know how they could, legally, disagree with the enforcing regulatory agency.

A dry cleaning company needed direction in the disposal of old cleaning machines, filters, and stills as well as empty barrels of solvent, sizing, soap and spotting chemicals. They also wanted to see the requirement of registration as a small quantity hazardous waste generator equally enforced to eliminate an unfair competitive advantage (see attachment B).

In businesses that had water separators, they wanted to know how they could dispose of that water. Another business wanted to have the term "spill" defined. They needed assistance in determining what was reportable and how to quantify the volume of a spill.

A frequent concern expressed by many of the participants at 4 regional symposiums was that there is a general lack of trust government, laws and regulations. Owners claim that they couldn't comply with all the laws and regulations because they change so frequently and are often in conflict with one another.

Another major problem has been in the delayed schedule of federally promulgated regulations regarding toxic emissions and other standards. Some businesses are aware that regulations will be offered that mandate certain control strategies. Unless the regulations are in place, the state SBAP cannot respond and assist these businesses.

Some programs such as the CFC program are directed from the EPA Regional Office. Small businesses are the usual victims of enforcement actions from a lack of education and understanding of environmental regulations and correct disposal methods. The EPA Regional Office should work closely with the SBAP to target these industries for targeted group sessions prior to an enforcement campaign by the regional office.

SUMMARY

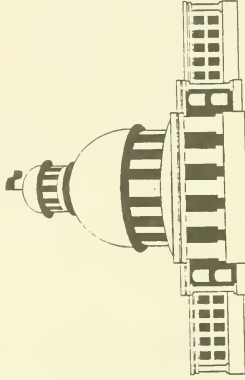
The Congress was insightful in creating the Small Business Assistance Program. This program will do more for environmental regulatory compliance than any other method. Small businesses must have some financial assistance in meeting these costly control practices. The Federal Government needs to do its share in promulgating timely regulations and working cooperatively with state SBAPs to exact the corrective measures needed to achieve the National Ambient Air Quality Standards.

In conclusion, Louisiana would like to express its appreciation to the subcommittee for allowing the State to submit written testimony.

ATTACHMENT "A"

Federal Clean Air Act

Small Business Assistance Program



Presented by the Louisiana Department of Environmental
Quality, Air Quality Division, Small Business Assistance

Federal Clean Air Act

Small Business Assistance Program



Department of Environmental Quality

Federal Clean Air Act

1990 Amendments

- Title I NAAQS
- Title II Mobile Sources
- Title III HAPs (air toxics)
- Title IV Acid Rain
- Title V Permits
- Title VI Stratospheric Ozone
- Title VII Enforcement

The Seven Criteria Air Pollutants

National Standards

- Carbon Monoxide
- Nitrogen Dioxide
- Sulfur Oxides
- Total Suspended Particulate Matter
- Lead
- Hydrocarbons
- Ozone

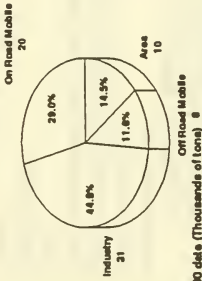
EPA Established

Ozone Area Classifications

Class	Level (ppb)	Attainment date
Marginal	121 to 137	1983
Moderate	138 to 159	1986
Serious	160 to 179	1996
Severe 1	180 to 190	2005
Severe 2	191 to 279	2007
Extreme	280 & greater	2010

VOC Emissions

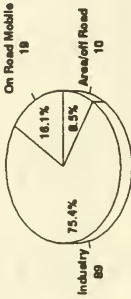
Six Parish Area



1990 data (Thousands of tons)

NOx Emissions

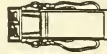
Six Parish Area



1990 data (Thousands)

Stage II Implementation

Baton Rouge Area



- 410 facilities
- Avg. throughput/yr = 321,930,000 gals
- Avg. VOC reductions/yr = 4,128,752 lbs
- Gasoline recovered/yr = 884,101 gals

6 parishes

I/M Program Description

Six Parish BR Area

- 600,000 light duty vehicles affected
- Conduct biennial vehicle inspections
- Loaded I/M 240, pressure & purge testing
- Contractor operated inspection stations
- Covers model years 1968 - current
- Inspections begin in January of 1995
- Vehicles to be free after repairs

CAA Required



Air Toxics

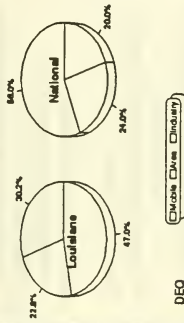
Major New Provisions

- Pollutant and Source Category Lists.
- MACT.
- Area Sources.
- Schedule For Standards.
- Residual Risk.
- Accidental Releases.

Clean Air Act

Source of Air Toxics

National vs. La. '87 baseline



DEQ

Accidental Releases

CAA Title III Requirement

- General duty of owners/operators to handle listed substances safely.
- EPA to develop regulations to prevent accidental releases.
- Regulations include list of chemicals to be developed from the SARA EHS list (minimum of 100 chemicals).
- Risk management plans and hazard assessments.
 - Required by facilities with listed chemicals over threshold quantities.
- Chemical Safety Board

Pollutant And Source Category Lists

CAA Title III

- List of categories of major and area sources.
- Published within 1 year.
- Major Sources
 - Contiguous area under common control.
 - Aggregate annual emissions; 10 ton/yr for any listed pollutant or 25 tons/yr for any combination of pollutants
 - lesser quantiles may be established.
- Area Sources
 - Smaller than major sources but concern based on aggregate emissions (e.g., dry cleaners, gas stations, print shops, etc.)

Operating Permits Program

Title V

- Final EPA Rule CFR 40 Part 70.
- Finalized June 25, 1992.
- State Program Due 11/15/93.
- Advisory Committee Approach.

CAA 502 (d)

Federal Operating Permits Program

CAA Title V

- Permit will document all requirements.
- Sources will have greater certainty of their obligations.
- States are required to charge fees to operate the program.
- States are given flexibility to adjust fees for small businesses.
- Permit will have a maximum life of 5 years.
- Periodic compliance reports will be required.
- "General Permits" to be issued to small sources.
- Operating flexibility for market variables.
- Minor permit change provisions.

Enforcement

CAA Title VII

- New and modernized enforcement provisions:
 - Adopt features of other more recently revised environmental statutes.
- The new act changes the mix of enforcement actions, increasing number of criminal and administrative actions.
- New clear standards enhance enforceability of act.

New Criminal Features

CAA Title VII

- Knowing violations of the act raised from misdemeanors to felonies.
- New categories of crimes:
 - For releases of hazardous air pollutants.
 - for knowing recordkeeping and fee violations.

ATTACHMENT "B"

THE DRY CLEANING INDUSTRY

A Short Clean Story for Owners

1993

Presented by the Louisiana Department of Environmental
Quality, Air Quality Division, Small Business Assistance
Program - prepared by Richard A. Lehr, PE

THE DRY CLEANING INDUSTRY

AN OVERVIEW

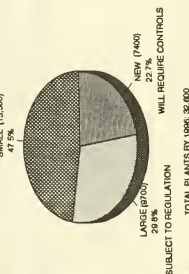
Approximately 9,700 existing commercial and industrial dry cleaning facilities are uncontrolled and will be subject to regulation. They will be required to utilize maximum achievable control technology (MACT).

Approximately 15,500 existing dry cleaning facilities are small and will not be subject to regulation. They will however be required to have DEQ id numbers and utilize generally available control technology (GACT).

1

DRY CLEANING FACILITIES

SMALL, LARGE AND FUTURE



2 Ref. date: 1/901

2

EMISSION REGULATIONS

BACKGROUND

Under Section 112 of the Clean Air Act (CAA) as amended in 1990, National Emission Standards for Hazardous Air Pollutants (NESHAP) to limit emissions of perchloroethylene (PERC) were proposed on December 9, 1991.

A Consent Decree, requires that this NESHAP limit must be promulgated by November 15, 1992. Two years following enactment of the new amendments to the CAA.

3

EMISSION DESIGNATIONS

MAJOR AND AREA SOURCES

MAJOR SOURCE

1. Dry-to-dry machine that consumes 3,100 gals. per year or more of PERC.
2. Transfer machine that consumes 2,000 gals. per year or more of PERC.

AREA SOURCES

Any dry-to-dry or transfer machine that consumes less than the above amounts

4

RECOMMENDED STANDARDS

NEW DRY CLEANING FACILITIES

New dry cleaning facilities must achieve compliance upon startup.

EXEMPTION: Dry-to-dry machines consuming less than 220 gpy of PERC and Transfer machines consuming less than 300 gpy of PERC are exempt.

An initial consumption report must be submitted to prove qualification for exemption status.

5

RECOMMENDED STANDARDS

EQUIPMENT

- a) Equipment must limit process vent emissions and pollution practices must limit fugitive emissions.
- b) Requires use of carbon adsorber, refrigerated condenser, or equivalent (95% control) for major and area sources dry-to-dry machines.
- c) Requires use of carbon adsorber, or equivalent (95% control) for new, reconstructed, or uncontrolled major and area source transfer machines.

6

RECOMMENDED STANDARDS

EQUIPMENT

- d) Requires use of a refrigerated condenser or equivalent (85% control) for existing refrigerated-condenser controlled area source transfer machine.

7

RECOMMENDED PRACTICES

POLLUTION PREVENTION

- a) Conduct weekly leak inspections.
- b) Store all solvent and solvent waste in tightly sealed containers which are impervious to the solvent and do not react with the solvent.
- c) A spill of 100 pounds or more of a solvent must be reported to the DEQ if the spill is exposed to the atmosphere.

8

COMPLIANCE

DATES

Existing dry cleaning machines that are larger than 50 lbs. must achieve compliance by April 15, 1994. Existing machines that are 50 lbs. or smaller must achieve compliance by November 15, 1995.

EXEMPTION: Dry-to-dry machines consuming less than 220 gpy of PERC and Transfer machines consuming less than 300 gpy of PERC are exempt.

An initial consumption report must be submitted to prove qualification for exemption status.

9

RECOMMENDED STANDARDS

OPERATION AND MAINTENANCE

- a) To insure proper operation of a carbon adsorber, desorption is required at least each time the machine cleans 6.6 lbs. of articles per 2.2 lbs. of activated carbon. Steam pressure must be at least 1.7 atmospheres; air flow must be at least 10.6 cu.ft./sec.; and no bypass to the atmosphere is permitted.

10

RECOMMENDED STANDARDS

OPERATION AND MAINTENANCE

- b) To insure proper operation of a refrigerated condenser, no exhaust gases are allowed to be vented to the atmosphere or circulated through a ventless machine until the air-vapor stream temperature on the outlet side of the refrigerated condenser is less than or equal to 4.4C (40F)

11

RECOMMENDED STANDARDS

OPERATION AND MAINTENANCE

- c) Before disposal, cartridge filters must be drained in their housing or in a sealed container for at least 24 hours, or must be dried in an enclosure vented to the control device.

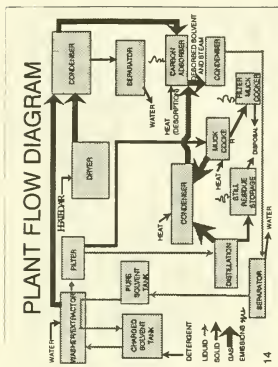
12

RECOMMENDED STANDARDS

OPERATION AND MAINTENANCE

- d) A weekly inspection for liquid and vapor leaks is required using visual inspection or a portable halogenated-hydrocarbon detector.

If any leaks are found, they must be repaired or a purchase order for repair parts must be initiated within three working days.



SOURCES OF LEAKAGE

VAPOR

- a) Deodorizing and aeration valves on dryers
- b) Air and exhaust ductwork (condensation)
- c) Open doors. Leaks in the system should be confined to the washer and dryer.
- d) Button traps and lint baskets should be opened only as long as necessary.
- e) Lint screens and bags, fan blades and condensers.
- f) Overloading and underloading.
- g) Inefficient extraction.

SOURCES OF LEAKAGE

LIQUID

- a) Hose connection, unions, couplings & valves
- b) Machine door gaskets and seating
- c) Filter head gaskets and seating
- d) Pump packing and fittings
- e) Base tanks and storage containers
- f) Water separators (poor separation)
- g) Filter sludge recovery (improper recovery)
- h) Distillation unit
- i) Saturated lint from lint basket
- j) Cartridge filters

RECOMMENDED STANDARDS

REPORTING AND RECORDKEEPING

- An initial report is required from all business owners or operators, including name, address, brief description of dry cleaning machine, operating design capacity, type of control device and the annual solvent consumption.
- Owners/operators must keep records of the amount of solvent consumed, the results of weekly inspections, and dates when repairs are made or purchase orders for repairs initiated.

17

RECOMMENDED STANDARDS

REPORTING AND RECORDKEEPING

- If using a carbon adsorber for compliance, the frequency and period of desorption must be recorded.
- If solvent consumption level increases so that exemption status no longer applies, a compliance report must be submitted to indicate that compliance with the standard is being achieved.

18

IMPACT OF CLEAN AIR ACT

COSTS (35lb machine)

OPERATING COSTS

Carbon Adsorber: increases cost about \$3,800/yr.
Refrigerated Condenser: Increases about \$1,700/yr.

CAPITAL COSTS

Dry-to-Dry machine w/Carbon adsorber - \$6,800
Dry-to-Dry machine w/Refrigerated condenser-\$5,300

19

THE DRY CLEANING INDUSTRY

ACRONYMS

- CAA - Clean Air Act
- HAP - Hazardous Air pollutants
- NESHAP - National Emissions Standards for Hazardous Air Pollutants.
- gpy - Gallons per year
- DEQ - Department of Environmental Quality
- SBAP - Small Business Assistance Program
- Source - Any emitter of hazard air pollutants
- Area Source - Small source-part of major source
- GACT - Generally Available Control Technology
- MACT - Maximum Achievable Control Technology

20

The Society of the
Plastics Industry, Inc.



1275 K Street, N.W., Suite 400
Washington, D.C. 20005-4006
(202) 371-5200
FAX (202) 371-1022

April 8, 1993

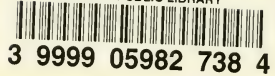
The Honorable Joseph Lieberman
Chairman
Senate Subcommittee on Clean Air and Nuclear Regulations
United States Senate
458 Dirksen Senate Office Building
Washington, DC 20510

Dear Sen. Lieberman:

The Society of the Plastics Industry, Inc. (SPI), requests that the following comments be included in the official hearing record for the Subcommittee's March 10th Oversight Hearing on Section 507 of the 1990 Amendments to the Clean Air Act: Technical Assistance to Small Business. SPI is a not-for-profit trade organization of more than 2,000 members representing all segments of the U.S. plastics industry. The Society's members include processors and manufacturers of plastics and plastics products, suppliers of raw materials, processors and converters of plastics resins and manufacturers of accessory equipment for the plastics industry. Founded in 1937, SPI is the major national trade association of the plastics industry.

Some 60% of SPI's 1600 corporate members employ less than 100 people and many employ 50 workers or less. It is on behalf of these small businesses that we make the following points:

1. SPI supports the concept of complete confidentiality as a part of the state environmental audit program;
2. SPI supports the establishment of an Ombudsman's Office in every state; and,
3. SPI supports eliminating permit requirements for very small sources of emissions and amending policies concerning minor source enforcement.



1. Small Business Technical Assistance/ Confidentiality/ Environmental Audits

Most state implementation plans (SIPs) allow the option of using state auditors or a pre-approved list of outside auditors to conduct environmental audits of small businesses. Smaller businesses will be reluctant to request state auditors for fear of retribution or unknowingly violating the SIP. Use of an outside contractor to conduct the audits would encourage small business participation in the state audit plan. That may, however, be a problem due to the confidentiality issue discussed below.

SPI believes that the Clean Air Act does not allow for the complete confidentiality of the results of an environmental audit, even when the permittee conducts the audit. We expect to refer our members to small business assistance programs that contain adequate confidentiality guarantees that avoid exposing them to unnecessary legal liability.

There are other additional steps that can be taken to enhance the confidentiality of audit procedures and results to insulate small businesses from liability:

- A pledge of confidentiality to potential participants in this program will help its success. We would offer the following language, which is under consideration in the state of Ohio, as a pledge that EPA should encourage:

"No knowledge, information, data, documentation or other matter obtained directly or indirectly by the director in carrying out the small business stationary source technical and environmental compliance assistance program shall be used by the director or by the attorney general or by any other person in any administrative, civil or criminal enforcement action against any person."
- If such a pledge cannot be made in all instances, a "Miranda"-style warning against self-incrimination should be given. For example, where a grievous violation of state law is discovered, that exception should be communicated to the potential participant prior to the audit. We also would urge that the states and EPA adopt an enforcement policy against criminal prosecution for violations that are voluntarily disclosed.

2. Small Business Ombudsman

SPI supports the following description of the proper role for an Ombudsman as expressed by the U.S. EPA in an April 6 review of a proposed Arkansas program:

"The Small Business Ombudsman "Office" should be located in the state's Attorney General's Office, as an "independent office" under the head of the Department of

Pollution Control and Ecology, or in the Office of the Governor. The Office should be adequately funded and staffed to investigate complaints, provide advice and assistance, make reports to higher authority, disseminate information, conduct independent studies, and participate in and sponsor small business meetings and conferences."

3. Permit Thresholds/Minor Source Enforcement

The Texas Air Pollution Control Board has approved an amendment to its enforcement rules for minor sources entitled: "Agreed Board Orders Without Penalty." The U.S. EPA's guidelines to the states on establishing small business technical advisory programs indicate that it will not approve a program that grants across-the-board amnesty to sources.

Under the Texas Air Control Board's new approach, the Board would grant limited enforcement forgiveness with no audits involved, and would apply forgiveness only to past minor violations of state law, not the new federal permit requirements. This method not only allows small business to approach the new permit program with a "clean slate" and more positive attitude, it also frees up the time of state enforcement personnel for truly grievous violations of state environmental law.

EPA should not only encourage Texas' approach to minor infractions of pre-Title V permits, but also should promulgate guidelines for the states based on this concept for violations under Title V.

In proposed rules in Virginia, the following increases in current levels of exemptions for operating permits are being offered and may be useful in other states, if the thresholds do not compromise the clean air goals in the State Implementation Plan:

1. From 350,000 to 1,000,000 BTU per hour for fuel burning equipment using solid fuel.
2. For new sources with uncontrolled emissions rates, from 10 to 40 tons per year for emissions of nitrogen dioxide and sulfur dioxide; from 1 to 15 tons per year for emissions of particulate matter, and from 7 to 25 tons per year for emissions of volatile organic compounds.
3. For modified sources with uncontrolled emission rates, from 1 to 10 tons per year from emissions of particulate matter, and from 7 to 10 tons per year for emissions of volatile organic compounds.

These changes are being offered for the dual purpose of lessening the impact of the new clean air permit program on small business and to optimize the use of state staff by eliminating staff time spent on inconsequential emission sources and their permits.

This threshold concept should be encouraged by EPA as a way to make the paperwork burden of the new Title V program more manageable, especially for small businesses.

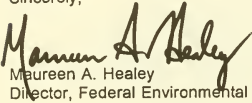
4. Conclusion

SPI is heartened by the Subcommittee's efforts to better understand the impact of the 1990 Clean Air Act on small businesses. Costs and man-hours are two major considerations in the way these small companies conduct business, and many businesses already operate on a small profit margin.

We do have concerns, however, about the lack of confidentiality that may accompany the results of environmental audits and other information acquired at the state level. In addition, we continue to support the establishment of a state Ombudsman's office that will have adequate funding to provide the necessary information and technical assistance needed by small businesses. Finally, we encourage establishing an exemption level for small sources that have incurred minor infractions. This not only will allow the small business to approach the new permit program with a "clean slate" but will provide the state air pollution control agency more time and resources to address more severe pollution violations.

SPI appreciates the Subcommittee's attention to this issue and would be happy to answer any questions you may have.

Sincerely,



Maureen A. Healey
Director, Federal Environmental and Transportation Issues

cc: Peter Scher, Staff Director
Senate Environment and Public Works Committee
Steve Shimberg, Minority Staff Director
Senate Environment and Public Works Committee
Kate Kimball, Majority Counsel
Senate Clean Air and Nuclear Regulation Subcommittee
Karen Field, Minority Staff
Senate Clean Air and Nuclear Regulation Subcommittee

- 4 -



ISBN 0-16-040907-1



90000



9 780160 409073

